EXHIBIT A

UNITED STATES DISTRICT COURT

for the

Northern District of 1	Illinois
STEVEN E. BERKHEIMER,	
Plaintiff)	
,	Civil Action No. 1:12-cv-09023
HEWLETT-PACKARD COMPANY)	
Defendant)	
SUBPOENA TO PRODUCE DOCUMENTS, OR TO PERMIT INSPECTION OF PRE	
To: Open Text Cor c/o Corporation Service Company, 251 Little F	alls Drive, Wilmington, Delaware 19808
(Name of person to whom this	s subpoena is directed)
documents, electronically stored information, or objects, and to pe material: See Attachment A to Open Text Corporation Subpoena a See also the attached Protective Order of July 15, 2014,	appended hereto. document 77 in the above captioned civil action.
Place: Parcels, Inc.	Date and Time:
230 N. Market St., Wilmington, Delaware 19801 (or as otherwise agreed by the parties)	03/03/2020 9:30 am
☐ Inspection of Premises: YOU ARE COMMANDED to p other property possessed or controlled by you at the time, date, and may inspect, measure, survey, photograph, test, or sample the property.	d location set forth below, so that the requesting party
The following provisions of Fed. R. Civ. P. 45 are attached Rule 45(d), relating to your protection as a person subject to a subgrespond to this subpoena and the potential consequences of not do Date: 02/17/2020	poena; and Rule 45(e) and (g), relating to your duty to
CLERK OF COURT	
	OR /s/James P. Hanrath
Signature of Clerk or Deputy Clerk	Attorney's signature
The name, address, e-mail address, and telephone number of the at Berkheimer	ttorney representing (name of party) Plaintiff Steven E. , who issues or requests this subpoena, are:

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things or the inspection of premises before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:12-cv-09023

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

	opoena for (name of individual and title, if an	y)				
(date)						
☐ I served the subpoena by delivering a copy to the named person as follows:						
,		on (date) ;	or			
☐ I returned the	subpoena unexecuted because:					
	States, or one of its officers or agents, I, and the mileage allowed by law, in the					
fees are \$		for services, for a total of \$	0.00			
I declare under pe	enalty of perjury that this information is	s true.				
e:		Server's signature				
	-					
		Printed name and title				
		Server's address				

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)

(c) Place of Compliance.

- (1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:
- (A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
- (B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
 - (i) is a party or a party's officer; or
- (ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

- (A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
 - (B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

- (A) Appearance Not Required. A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.
- (B) Objections. A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:
- (i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
- (ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

- (A) When Required. On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:
 - (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
 - (iv) subjects a person to undue burden.
- (B) When Permitted. To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:
- (i) disclosing a trade secret or other confidential research, development, or commercial information; or

- (ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.
- (C) Specifying Conditions as an Alternative. In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:
- (i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
 - (ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

- (1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored
- (A) Documents. A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.
- (B) Form for Producing Electronically Stored Information Not Specified. If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.
- (C) Electronically Stored Information Produced in Only One Form. The person responding need not produce the same electronically stored information in more than one form.
- (D) Inaccessible Electronically Stored Information. The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

- (2) Claiming Privilege or Protection.
 (A) Information Withheld. A person withholding subpoensed information under a claim that it is privileged or subject to protection as trial-preparation material must:
 - (i) expressly make the claim; and
- (ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.
- (B) Information Produced. If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court-may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

Attachment A

Attachment A to Open Text Corporation Subpoena

Definitions

- 1. The term "person" includes without limitation any natural person, firm, association, partnership, corporation, or any other form of legal entity, including but not limited to, associations, organizations, companies, partnerships, joint ventures, corporations, trusts, and estates, and all divisions, departments, and other such units thereof or therein.
- 2. The terms "Open Text," "Open Text Corporation," "you," and "your" mean and includes (1) Open Text Corporation and its subsidiaries and divisions, (2) any successors and predecessors thereof, and/or (3) any and all persons or entities acting on Open Text Corporation's behalf, including but not limited to employees, officers, directors, attorneys, agents or representatives thereof, and including Open Text Corporation's distributors, sales and marketing allies, partners or associates.
- 3. The term "Plaintiff" means Plaintiff Steven E. Berkheimer and his attorneys, consultants, investigators, accountants, and all other persons acting on his behalf.
- 4. The term "HP" means HP, Inc., formerly known as defendant Hewlett-Packard Company, and its divisions, departments, affiliates, sister entities and parent entities, including (but not limited to), any persons acting on its behalf and includes all of its predecessors (merged, acquired, or otherwise), successors, and subsidiaries.
- 5. The term "HP Exstream" means HP Exstream software, services, software platforms as well as all modules, iterations or versions thereof and any software or software platform incorporating all or part of the same which were made, imported into, used, sold, or offered for sale, or licensed by Hewlett-Packard Company or its successors in the United States since November 4, 2008.

- 6. The term "all" shall mean "any and all," so as to bring within the scope of a topic listed herein all information that otherwise might be construed to be outside its scope.
- 7. The terms "and" as well as "or" shall be construed disjunctively or conjunctively as necessary to bring within the scope of a topic all information that might otherwise be construed to be outside its scope.
- 8. The term "communication" means any transmission of information from one person to another.
- 9. The term "document" or "documents" shall have the broadest possible meaning permitted by Federal Rules of Civil Procedure 26 and 34 and the relevant case law and shall include, without limitation, any electronically stored information, and any "writings," "recordings" and "photographs" as defined by Federal Rule of Evidence 1001. The terms "document" or "documents" shall include, without limitation, any tangible thing upon which any expression, communication or representation has been recorded by any means including, without limitation, handwriting, typewriting, printing, photostatting, photographing, magnetic impulse, or mechanical or electronic recording and any nonidentical copies (whether different from the original because of notes made on such copies, because of indications that said copies were sent to different individuals than were the originals, or because of any other reason), including, without limitation, working papers, preliminary, intermediate or final drafts, correspondence, memoranda, charts, notes, records, invoices, financial statements or calculations, diaries, reports of telephone or other oral conversations, desk calendars, appointment books, audio or video tape recordings, microfilm, microfiche, computer tape, computer disk, computer printout, computer card, electronic mail, and all other writings and recordings of every kind.

- 10. The terms "concerning," "regarding," "related to," "relate to," or "relating to," and any variants thereof as used herein shall be construed in their broadest sense to mean connected to, referencing, referring to, or identifying, evidencing, constituting, respecting, concerning, pertaining to, based upon, stating, establishing, showing, supporting, contradicting, describing, recording, noting, reflecting, embodying, memorializing, containing, mentioning, studying, analyzing, or discussing, either directly or indirectly any subject matter contained in a request or any communication regarding a subject matter in a request.
- 11. The term "Lawsuit" means the above-captioned action, namely case number 1:12-cv-09023 of the United States District Court for the Northern District of Illinois, Eastern Division.
- 12. The term '713 Patent means U.S. Patent 7,447,713 entitled "System and Method for Archiving and Outputting Documents or Graphical Items" issued on November 4, 2008 from application number 09/977,502 filed October 15, 2001 which claims priority to provisional patent application number 60/240179 filed on October 13, 2000.

Instructions

- A. Unless otherwise specified, the time period covered by each document request is from November 4, 2008 to the present.
- B. Each request contained herein extends to all documents in your possession, custody, or control.
- C. These requests specifically require the production of all responsive documents.
- D. The identification obligations contained in these Instructions do not relieve you of any common law or statutory duty to preserve evidence in this lawsuit. You should preserve all relevant and potentially relevant information regardless of the source of that information and shall take measures to ensure that any processes by which potentially relevant information could be automatically deleted or overwritten shall be suspended until such time as the parties have come to agreements regarding the same.
- E. To the extent that you contend that potentially relevant documents might reside on dynamic databases or other non-static computer systems, you shall identify all such databases or systems with specificity and identify the types of potentially relevant documents that might reside on such databases or systems.
- F. If you assert any privilege in responding to any request, describe in detail in each instance the type of privilege asserted, the basis for the assertion, all facts relied upon in support of the claim of privilege or related thereto, and identify, to the fullest extent short of waiver, all information as to which you claim a privilege. Documents shall not be withheld on the grounds that they contain highly sensitive or confidential information, but instead shall be designated in accordance with the terms of the attached protective order applicable to the Lawsuit, information of which may be obtained from Plaintiffs' counsel of record.

- G. If privileged or protected information is inadvertently produced, you may by timely notice assert the privilege or protection and you may obtain return of the materials without waiver. For this reason, you may not avoid or delay production obligations based on blanket, non-specific assertions of privilege or other protection.
- H. If, after making your initial production and inspection, you obtain or become aware of any further Documents responsive to these requests, you are required to produce such additional documents to Plaintiffs' counsel in this Lawsuit pursuant to Rule 26(e) of the Federal Rules of Civil Procedure.
- I. In construing any document request, the singular form of a word shall be interpreted as plural and plural as singular as necessary to bring within the scope of the request any information or documents which might otherwise be construed to be outside its scope.
- J. In construing any document request, whenever appropriate, "and" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the request any information which might otherwise be construed to be outside its scope; and "all" shall mean "any and all," unless the context requires otherwise.
- K. Each document request shall be construed independently and not with reference to any other request herein for purposes of limitation, unless a request so specifies.

DOCUMENTS REQUESTED

- 1. All documents and communications that refer to, relate to, or concern your acquisition of HP Exstream.
- 2. All documents and communications that refer to, relate to, or concern any agreement(s) between OpenText (and/or its affiliates) and HP Inc., formerly known as Hewlett-Packard Company, (and/or its predecessors, and affiliates) pertaining to HP Exstream, including, but not limited to, any sale, license, acquisition, asset transfer, contract, indemnification, warranty, or consulting agreements.
- 3. All documents and communications that refer to, relate to, or concern any due diligence relative your acquisition of HP Exstream.
- 4. All documents and communications that refer to, relate to, or concern items 1, 2, and/or 3 above, including but not limited to all agreements, schedules, exhibits, and closing documents relating to the sale or asset transfer of HP Exstream to OpenText Corporation, including all agreements, representations and warranties, indemnifications, HP Exstream software evaluations, all IP schedules, valuations, financial disclosures, pricings, provisions of contingencies, hold-back of monies, and litigation references.
- 5. All documents and communications that refer to, relate to, or concern Steven E. Berkheimer or his '713 Patent.
- 6. All documents and communications that refer to, relate to, or concern the Lawsuit.
- 7. All documents and communications that refer to, relate to, or concern any removal of functionality from HP Exstream.
- 8. All documents and communications that refer to, relate to, or concern modification, alteration, disassembly and/or decompiling of source code of HP Exstream.

Case: 1:12-cv-09023 Document #: 77 Filed: 07/15/14 Page 1 of 18 PageID #:1688

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

STEVEN E. BERKHEIMER,

Plaintiff,

٧.

HEWLETT-PACKARD COMPANY,

Defendant.

Civil Action No. 1:12-cv-09023

Hon. John Z. Lee Hon. Jeffrey T. Gilbert

PROTECTIVE ORDER

The Court enters the following protective order pursuant to Federal Rule of Civil Procedure 26(c)(1).

1. Findings: The Court finds that the parties to this case, and other non-parties, may request or produce information involving trade secrets or confidential research and development or commercial information, the disclosure of which is likely to cause harm to the party producing such information.

2. Definitions:

- a. "Party" means a named party in this case. "Person" means an individual or an entity. "Producer" means a Person who produces information via the discovery process in this case. "Recipient" means a Person who receives information via the discovery process in this case.
- b. "Confidential" information is information concerning a Person's business operations, processes, and technical and development information within the scope of Rule 26(c)(1)(G), the disclosure of which is likely to harm that Person's competitive position,

or the disclosure of which would contravene an obligation of confidentiality to a third Person or to a Court.

- c. "Highly Confidential" information is information within the scope of Rule 26(c)(1)(G) that is current or future business or technical trade secrets and plans more sensitive or strategic than Confidential information, the disclosure of which is likely to significantly harm that Person's competitive position, or the disclosure of which would contravene an obligation of confidentiality to a third Person or to a Court.
- d. "Restricted-Confidential Source Code" information is information containing or substantively relating to Confidential, proprietary, and/or trade secret source code or technical design documentation, including computer code, scripts, assembly, object code, source code listings and descriptions of source code, and object code listings and descriptions of object code.
- e. Information is not Confidential, Highly Confidential, or Restricted-Confidential Source Code if it is disclosed in a printed publication, is known to the public, was known to the Recipient without obligation of confidentiality before the Producer disclosed it, or is or becomes known to the Recipient by means not constituting a breach of this Order. Information is likewise not Confidential, Highly Confidential, or Restricted-Confidential Source Code if a Person lawfully obtained it independently of this litigation.
 - Designation of information as Confidential or Highly Confidential:
- a. A Person's designation of information as Confidential or Highly Confidential means that the Person believes in good faith, upon reasonable inquiry, that the information qualifies as such.

- b. A Person designates information in a document or thing as Confidential or Highly Confidential by clearly and prominently marking it on its face as "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL." A Producer may make documents or things containing Confidential or Highly Confidential information available for inspection and copying without marking them as Confidential without forfeiting a claim of confidentiality, so long as the Producer causes copies of the documents or things to be marked as Confidential or Highly Confidential before providing them to the Recipient.
- c. A Person designates information in deposition testimony as Confidential or Highly Confidential by stating on the record at the deposition that the information is Confidential or Highly Confidential or by advising the opposing Party and the stenographer and videographer in writing, within fourteen days after receipt of the deposition transcript, that the information is Confidential or Highly Confidential.
- d. A Person's failure to designate a document, thing, or testimony as Confidential or Highly Confidential does not constitute forfeiture of a claim of confidentiality as to any other document, thing, or testimony.
- e. A Person who has designated information as Confidential or Highly

 Confidential may withdraw the designation by written notification to all Parties in the case.
- f. If a Party disputes a Producer's designation of information as Confidential or Highly Confidential, the Party shall notify the Producer in writing of the basis for the dispute, identifying the specific document[s] or thing[s] as to which the designation is disputed and proposing a new designation for such materials. The Party and the Producer shall then meet and confer to attempt to resolve the dispute without involvement of the Court. If they cannot resolve the dispute, the proposed new designation shall be applied fourteen (14) days after

notice of the dispute unless within that fourteen day period the Producer files a motion with the Court to maintain the Producer's designation. The Producer bears the burden of proving that the information is properly designated as Confidential or Highly Confidential. The information shall remain subject to the Producer's Confidential or Highly Confidential designation until the Court rules on the dispute. A Party's failure to contest a designation of information as Confidential or Highly Confidential is not an admission that the information was properly designated as such.

- 4. Use and disclosure of Confidential or Highly Confidential information:
- a. Confidential and Highly Confidential information may be used exclusively for purposes of this litigation, subject to the restrictions of this order.
 - 1. Absent written permission from the Producer or further order by the Court, the Recipient may not disclose Confidential information to any Person other than the following: (i) a Party's outside counsel of record, including necessary paralegal, secretarial and clerical personnel assisting such counsel; (ii) a Party's in-house counsel; (iii) a Party's officers and employees directly involved in this case whose access to the information is reasonably required to supervise, manage, or participate in this case; (iv) a stenographer and videographer recording testimony concerning the information; (v) subject to the provisions of paragraph 4(d) of this order, experts and consultants and their staff whom a Party employs for purposes of this litigation only; and (vi) the Court and personnel assisting the Court.

- b. Absent written permission from the Producer or further order by the Court, the Recipient may not disclose Highly Confidential information to any Person other than those identified in paragraph 4(b)(i), (iv), (v), and (vi).
- c. A Party may not disclose Confidential or Highly Confidential information to an expert or consultant pursuant to paragraph 4(b) or 4(c) of this order until after the expert or consultant has signed an undertaking in the form of Appendix 1 to this Order. The Party obtaining the undertaking must serve it on all other Parties within ten days after its execution. At least ten days before the first disclosure of Confidential or Highly Confidential information to an expert or consultant (or member of their staff), the Party proposing to make the disclosure must serve the Producer with a written identification of the expert or consultant and a copy of his or her curriculum vitae. If the Producer has good cause to object to the disclosure (which does not include challenging the qualifications of the expert or consultant), it must serve the Party proposing to make the disclosure with a written objection within ten days after service of the identification. Unless the Parties resolve the dispute within ten days after service of the objection, the Producer must move the Court promptly for a ruling, and the Confidential or Highly Confidential information may not be disclosed to the expert or consultant without the Court's approval.
- d. Notwithstanding paragraph 4(a) and (b), a Party may disclose Confidential or Highly Confidential information to: (i) any employee or author of the Producer; (ii) any Person, no longer affiliated with the Producer, who authored the information in whole or in part; and (iii) any Person who received the information before this case was filed.
- e. A Party who wishes to disclose Confidential or Highly Confidential information to a Person not authorized under paragraph 4(b) or 4(c) must first make a

reasonable attempt to obtain the Producer's permission. If the Party is unable to obtain permission, it may move the Court to obtain permission.

- Information Designated Restricted-Confidential Source Code:
- a. All information designated as Restricted-Confidential Source Code shall be subject to the following provisions:
 - Restricted-Confidential Source Code, to the extent any Producer agrees i. to provide any such information, shall ONLY be made available for inspection, not produced except as provided for below, and shall be made available in electronic format for inspection at the Chicago and Pittsburgh offices of the Producer's primary outside counsel of record in this action ("Inspection Rooms"). Restricted-Confidential Source Code will be loaded on a single, standalone, non-networked personal computer that is password protected, maintained in a secure, locked area, and disabled from having external storage devices attached to it ("Restricted-Confidential Source Code Computer"). The Restricted-Confidential Source Code Computer will be made available for inspection until the close of discovery in this action between the hours of 8:30 a.m. and 5:00 p.m. local time on business days (i.e., not on weekends or other Federal holidays), and only upon reasonable written notice to the Producer, which shall not be less than two (2) business days in advance of the requested inspection. A list of names of Persons who will view the Restricted-Confidential Source Code Computer will be provided to the Producer in conjunction with any written (including email) notice requesting inspection. Prior to the first inspection of any requested Restricted-Confidential Source Code, the Receiving Party shall provide seven (7) days notice of the Restricted-Confidential Source Code that it wishes to inspect.

The Producer shall install tools that are sufficient for viewing and searching the code produced, on the platform produced. For Berkheimer's review of HP's Restricted-Confidential Source Code, the Confidential Source Code Computers shall include Ubuntu 14.04 (64-bit) (aka Trusty Tahr) desktop Linux operating system with its standard Linux utilities (e.g., grep) and the following free software packages:

- doxygen, a utility for generating software documentation from annotated computer source code, available at http://www.ubuntuupdates.org/doxygen
- doxygen-gui, a graphical user interface configuration tool for doxygen, available at http://www.ubuntuupdates.org/doxygen-gui
- kdiff3, a utility for comparing files or directories, available at http://www.ubuntuupdates.org/kdiff3
- kompare, a graphical difference viewer that creates visualizations of the differences between files, available at http://www.ubuntuupdates.org/kompare
- graphviz, tools that used with doxygen can generate diagrams including class hierarchies and collaboration for source code, available at http://www.ubuntuupdates.org/graphviz
- python 2, an interactive high-level object-oriented programming language, available at http://www.ubuntuupdates.org/python
- python-pip, a package management system used to install and manage software packages written in Python, available at http://www.ubuntuupdates.org/python-pip
- realpath, a utility that returns the canonicalized absolute pathname, available at http://www.ubuntuupdates.org/realpath
- subversion, a software versioning and revision control system, available at http://www.ubuntuupdates.org/subversion
- kate, a text editor that can open multiple files simultaneously, available at http://www.ubuntuupdates.org/kate

Berkheimer shall reimburse HP for its costs incurred in providing the Confidential Source Code Computer in Pittsburgh, and any cost for utilizing the hardware and software configuration requested by Berkheimer in Pittsburgh. Any Berkheimer review of HP's Restricted-Confidential Source Code at the Pittsburgh

Inspection Room shall be for in-room inspection and note taking analysis only with no copying or printing of code therein.

- take notes relating to the Restricted-Confidential Source Code, and such notes relating to the Restricted-Confidential Source Code will be treated as Restricted-Confidential Source Code. If any portion of the Restricted-Confidential Source Code is copied directly into the notes, those notes shall be treated as Restricted-Confidential Source Code and shall be stored with any printouts of the Restricted-Confidential Source Code, as addressed below. No other written or electronic record of the Restricted-Confidential Source Confidential Source Code is permitted except as otherwise provided herein. The Producer may visually monitor the activities of the Receiving Party's representative(s) during any Restricted-Confidential Source Code review, but only to ensure that there is no unauthorized recording, copying, or transmission of the Restricted-Confidential Source Code. Berkheimer shall reimburse HP for its incremental costs in monitoring any source code inspection in the Pittsburgh Inspection Room.
- iii. No Person shall copy, e-mail, transmit, upload, download, print, photograph or otherwise duplicate any portion of the designated Restricted-Confidential Source Code, except as the Receiving Party may print portions of the unmodified Restricted-Confidential Source Code on watermarked or colored pre-bates numbered paper, which shall be provided by the Producer, but only if and to the extent necessary for the preparation of court filings, pleadings, expert reports, or other papers, or for deposition or trial in this action. Berkheimer may only print portions of the Restricted-Confidential Source Code in the Chicago Inspection Room. The printed

portions of the Restricted-Confidential Source Code shall be provided to the Producer's counsel for copying before being provided directly to Receiving Party's outside counsel. In no event may the Receiving Party print more than 20% of the total Restricted-Confidential Source Code. The printed pages shall constitute part of the Restricted-Confidential Source Code produced by the Producer in this action. At the inspecting Party's request, up to two additional sets (or subsets) of printed Restricted-Confidential Source Code may be requested and provided by the Producer in a timely fashion.

- iv. If the Producer objects that the printed portions are not reasonably necessary to any case preparation activity, the Producer shall make such objection known to the Receiving Party within three business days. If after meeting and conferring the Producer and the Receiving Party cannot resolve the objection (where such meet-and-confer need not take place in Person), within four business days, the Receiving Party may seek a Court resolution of whether the printed Restricted-Confidential Source Code in question is reasonably necessary to any case preparation activity.
- any printed pages of Restricted-Confidential Source Code or any other documents or things reflecting Restricted-Confidential Source Code that have been designated by the Producer as "RESTRICTED CONFIDENTIAL SOURCE CODE." The Receiving Party shall only make additional paper copies of selected excerpts of Restricted-Confidential Source Code if such additional copies are necessary for any filing with the Court, the service of any pleading or other paper on any Party, testifying expert

reports, consulting expert written analyses, deposition exhibits as discussed below, or any draft of these documents ("Restricted-Confidential Source Code Documents").

The Receiving Party shall only make additional copies of such excerpts as are reasonably necessary for the purposes for which such part of the Restricted-Confidential Source Code is used. Any paper copies used during a deposition shall be retrieved by the Producer at the end of each day and must not be given to or left with a court reporter or any other individual.

- SOURCE CODE" or notes, analyses or descriptions of such paper copies of Restricted-Confidential Source Code shall be stored or viewed only at the offices of outside counsel for the Receiving Party; (ii) the site where any deposition is taken; or (iii) the Court. Any such paper copies or notes, analyses or descriptions of such paper copies of Restricted-Confidential Source Code shall be maintained at all times in a secure location under the direct control of counsel responsible for maintaining the security and confidentiality of the designated materials and in a manner that prevents duplication of or unauthorized access to the Restricted-Confidential Source Code, including, without limitation, storing the Restricted-Confidential Source Code in a locked room or cabinet at all times, when it is not in use.
- vii. Unless otherwise agreed in advance by the Parties in writing, following each inspection, the Receiving Party's outside counsel and/or experts shall remove all notes, documents, and all other materials from the Inspection Room that may contain work product and/or attorney-client privileged information. The Producer shall not be responsible for any items left in the room following each inspection session.

- viii. The Receiving Party will not copy, remove, or otherwise transfer any portion of the Restricted-Confidential Source Code from the Restricted-Confidential Source Code Computer, except as allowed herein.
- b. Only the following individuals shall have access to "RESTRICTED CONFIDENTIAL SOURCE CODE" materials, absent the express written consent of the Producer or further court order:
 - i. Outside counsel of record for the Parties to this action, including any attorneys, paralegals, technology specialists and clerical employees of their respective law firms;
 - ii. Up to three (3) outside experts or consultants per Party, pre-approved in accordance with Paragraphs 4(c) and specifically identified as eligible to access

 Restricted-Confidential Source Code (by executing the required undertaking, attached as Exhibit A);
 - personnel, and court reporters or videographers recording testimony or other proceedings in this action. Court reporters and/or videographers shall not retain or be given copies of any portions of the Restricted-Confidential Source Code; for depositions, the Receiving Party shall not bring copies of any printed Restricted-Confidential Source Code. Rather, at least ten (10) days before the date of the deposition, the Receiving Party shall notify the Producer about the specific portions of Restricted-Confidential Source Code it wishes to use at the deposition, and the Producer shall bring printed copies of those portions to the deposition for use by the Receiving Party. Copies of Restricted-Confidential Source Code that are marked as

deposition exhibits shall not be provided to the Court Reporter or attached to deposition transcripts; rather, the deposition record will identify the exhibit by its production numbers; and

- iv. While testifying at deposition or trial in this action only: (i) any current or for ner officer, director or employee of the Producer or original source of the information; (ii) any Person designated by the Producer to provide testimony pursuant to Rule 30(b)(6) of the Federal Rules of Civil Procedure; and/or (iii) any Person who authored, previously received (other than in connection with this litigation), or was directly involved in creating, modifying, or editing the Restricted-Confidential Source Code, as evident from its face or reasonably certain in view of other testimony or evidence. Persons authorized to view Restricted-Confidential Source Code pursuant to this sub-paragraph shall not retain or be given copies of the Restricted-Confidential Source Code except while so testifying.
- c. The Receiving Party's outside counsel shall maintain a log of all Persons who review the Restricted-Confidential Source Code. The log shall include the names of the reviewers of the Restricted-Confidential Source Code and the dates when such review occurred. Upon request by the Producer, the Receiving Party shall provide reasonable assurances and/or descriptions of the security measures employed by the Receiving Party. Within thirty (30) days after the issuance of a final non-appealable decision resolving all issues in the case, the Receiving Party must serve upon the Producer the log and serve upon the Producer all paper copies of the Producer's Restricted-Confidential Source Code as well as documents, pleadings, reports, and notes reflecting or referring to such Restricted-Confidential Source Code.

- d. To the extent portions of Restricted-Confidential Source Code are quoted in a RESTRICTED-CONFIDENTIAL SOURCE CODE DOCUMENT, either (1) the entire document will be stamped and treated as RESTRICTED CONFIDENTIAL SOURCE CODE or (2) those pages containing quoted Restricted-Confidential Source Code will be separately bound, and stamped and treated as RESTRICTED CONFIDENTIAL SOURCE CODE.
- e. All copies of any portion of the Restricted-Confidential Source Code shall be returned to the Producer if they are no longer in use. Copies of Restricted-Confidential Source Code that are marked as deposition exhibits shall not be provided to the Court Reporter or attached to deposition transcripts; rather, the deposition record will identify the exhibit by its production numbers.
- f. Any technical advisor retained on behalf of a Receiving Party who is to be given access to a Producer's produced Restricted-Confidential Source Code (whether in electronic form or otherwise) must agree in writing not to perform software development work directly or indirectly intended for commercial purposes relating to any functionality covered by the Restricted-Confidential Source Code reviewed by such expert or consultant for a period of one year after the issuance of a final, non-appealable decision resolving all issues in the case. This shall not preclude such experts or consultants from consulting in future litigation, so long as such consulting does not involved software development work directly or indirectly intended for commercial purposes relating to any functionality covered by the Restricted-Confidential Source Code reviewed by such expert or consultant.
- g. Access to and review of the Restricted-Confidential Source Code shall be strictly for the purpose of investigating the claims and defenses at issue in the above-captioned

case. No Person shall review or analyze any Restricted-Confidential Source Code for purposes unrelated to this case, nor may any Person use any knowledge gained as a result of reviewing Restricted-Confidential Source Code in this case in any other pending or future dispute, proceeding, or litigation.

- 6. <u>Copies</u>: A Party producing documents as part of discovery must, upon request, furnish the requesting Party with one copy of the documents it requests, at the requesting Party's expense. Before copying, the Parties must agree upon the rate at which the requesting Party will be charged for copying.
- 7. <u>Inadvertent Disclosure</u>: Inadvertent disclosures of material protected by the attorney-client privilege or the work product doctrine shall be handled in accordance with Federal Rule of Evidence 502.

8. Filing with the Court:

- a. This protective order does not, by itself, authorize the filing of any document under seal. No document may be filed under seal without prior leave of court. A Party wishing to file under seal a document containing Confidential or Highly Confidential information must move the Court, consistent with Local Rule 26.2(b) and prior to the due date for the document, for permission to file the document under seal. If a Party obtains permission to file a document under seal, it must also (unless excused by the Court) file a public-record version that excludes any Confidential or Highly Confidential information.
- b. If a Party wishes to file in the public record a document that another Producer has designated as Confidential, Highly Confidential, or Restricted-Confidential Source Code, the Party must advise the Producer of the document no later than five business days before the

document is due to be filed, so that the Producer may move the Court to require the document to be filed under seal.

- c. Pursuant to Local Rule 5.8, any document filed under seal must be accompanied by a cover sheet disclosing (i) the caption of the case, including the case number; (ii) the title "Restricted Document Pursuant to Local Rule 26.2;" (iii) a statement that the document is filed as restricted in accordance with a court order and the date of the order; and (iv) the signature of the attorney of record filing the document.
- 9. <u>Document Disposal</u>: Upon the conclusion of this case, each Party must return to the Producer all documents and copies of documents containing the Producer's Confidential, Highly Confidential, or Restricted-Confidential Source Code information, and must destroy all notes, memoranda, or other materials derived from or in any way revealing Confidential or Highly Confidential information. Alternatively, if the Producer agrees, the Party may destroy all documents and copies of documents containing the Producer's Confidential, Highly Confidential, or Restricted-Confidential Source Code information. The Party returning and/or destroying the Producer's Confidential, Highly Confidential, or Restricted-Confidential Source Code information must promptly certify in writing its compliance with the requirements of this paragraph. Notwithstanding the requirements of this paragraph, a Party and its counsel may retain one complete set of all documents filed with the Court, remaining subject to all requirements of this order.
- 10. Originals: A legible photocopy of a document may be used as the "original" for all purposes in this action. The actual "original," in whatever form the Producer has it, must be made available to any other Party within ten days after a written request.

11. <u>Survival of obligations</u>: This order's obligations regarding Confidential, Highly Confidential, and Restricted-Confidential Source Code information survive the conclusion of this case.

Dated: 71514

agistrate Judge Jeffrey 1. Gilbert

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

INDERE VINCOE	
Defendant.	
HEWLETT-PACKARD COMPANY,	8
v.	Judge John Z. Lee
Plaintiff,	Civil Action No. 1:12-ev-09023
STEVEN E. BERKHEIMER,	

I, _______, state the following under penalties of perjury as provided by law:

I have been retained by _______ as an expert or consultant in connection with this case. I will be receiving Confidential, Highly Confidential, and/or Restricted-Confidential Source Code information that is covered by the Court's protective order dated ______ I have read the Court's protective order and understand that the Confidential, Highly Confidential, and Restricted-Confidential Source Code information is provided pursuant to the terms and conditions in that order.

I agree to be bound by the Court's protective order. I agree to use the Confidential, Highly Confidential, or Restricted-Confidential Source Code information solely for purposes of this case. I understand that neither the Confidential, Highly Confidential, and Restricted-Confidential Source Code information nor any notes concerning that information may be disclosed to anyone that is not bound by the Court's protective order. I agree to return the Confidential, Highly Confidential, and Restricted-Confidential Source Code information and

Case: 1:12-cv-09023 Document #: 77 Filed: 07/15/14 Page 18 of 18 PageID #:1705

any notes concerning that information to the at	ttorney for	ľ
to destroy the information and any notes at tha	at attorney's request.	
I submit to the jurisdiction of the Court	t that issued the protective order for purposes	of
enforcing that order. I give up any objections	I might have to that Court's jurisdiction over	
me or to the propriety of venue in that Court.		
Subscribed and sworn to before me thisday of, 20	signature	-
Notary Public		

EXHIBIT B

UNITED STATES DISTRICT COURT

for the

Northern District of Illinois

Normen	District of Hillions
STEVEN E. BERKHEIMER, Plaintiff v. HEWLETT-PACKARD COMPANY Defendant)) Civil Action No. 1:12-cv-09023))
SUBPOENA TO TESTIFY AT	T A DEPOSITION IN A CIVIL ACTION
To: c/o Corporation Service Company (Name of person Testimony: YOU ARE COMMANDED to approximate to the person or managing agents, or designate other persons who could be the person of those set forth in an attachment:	pen Text Corporation , 251 Little Falls Drive, Wilmington, Delaware 19808 In to whom this subpoena is directed) pepear at the time, date, and place set forth below to testify at a norganization, you must designate one or more officers, directors, pasent to testify on your behalf about the following matters, or open Text Corporation Subpoena appended hereto.
Place: Parcels, Inc. 230 N. Market St., Wilmington, Delaware 198 (or as otherwise agreed by the parties) The deposition will be recorded by this method	03/24/2020 3.00 am
☐ Production: You, or your representatives, mu electronically stored information, or objects, a material:	st also bring with you to the deposition the following documents, and must permit inspection, copying, testing, or sampling of the
Rule 45(d), relating to your protection as a person sub respond to this subpoena and the potential consequence. Date:02/17/2020	o are attached – Rule 45(c), relating to the place of compliance; ject to a subpoena; and Rule 45(e) and (g), relating to your duty to ses of not doing so.
CLERK OF COURT	OR /s/James P. Hanrath
Signature of Clerk or Dep	uty Clerk Attorney's signature
The name, address, e-mail address, and telephone num Berkheimer	, who issues or requests this subpoena, are:
James P. Hanrath, 191 N. Wacker Drive, Suite 1800, C	hicago, Illinois 60606 jhanrath@muchlaw.com; 312.521.2760
TAT 4. 4 AT	

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 1:12-cv-09023

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

n (date)		poena for (name of individual and title, if an	w)		
	☐ I served the subpoena by delivering a copy to the named individual as follows:				
			on (date) ; or		
	☐ I returned the s	ubpoena unexecuted because:			
		tness the fees for one day's attendance	States, or one of its officers or agents, I e, and the mileage allowed by law, in the		
⁄ly fees	are \$	for travel and \$	for services, for a total of \$	0.00	
	I declare under per	nalty of perjury that this information i	s true.		
ate:		<u> </u>	Server's signature		
			Printed name and title		
			1 imea name and thre		
			Server's address		

Additional information regarding attempted service, etc.:

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)

(c) Place of Compliance.

(1) For a Trial, Hearing, or Deposition. A subpoena may command a person to attend a trial, hearing, or deposition only as follows:

(A) within 100 miles of where the person resides, is employed, or

regularly transacts business in person; or

(B) within the state where the person resides, is employed, or regularly transacts business in person, if the person

(i) is a party or a party's officer; or

(ii) is commanded to attend a trial and would not incur substantial expense.

(2) For Other Discovery. A subpoena may command:

(A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and

(B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) Avoiding Undue Burden or Expense; Sanctions. A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction-which may include lost earnings and reasonable attorney's fees-on a party or attorney who fails to comply.

(2) Command to Produce Materials or Permit Inspection.

(A) Appearance Not Required. A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.

(B) Objections. A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises-or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:

(i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an

order compelling production or inspection.

(ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) Quashing or Modifying a Subpoena.

- (A) When Required. On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:
 - (i) fails to allow a reasonable time to comply;
- (ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
- (iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or

(iv) subjects a person to undue burden.

(B) When Permitted. To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

- (i) disclosing a trade secret or other confidential research, development, or commercial information; or
- (ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.
- (C) Specifying Conditions as an Alternative. In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:

(i) shows a substantial need for the testimony or material that cannot be

otherwise met without undue hardship; and

(ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) Producing Documents or Electronically Stored Information. These procedures apply to producing documents or electronically stored information.

(A) Documents. A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.

(B) Form for Producing Electronically Stored Information Not Specified. If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms

(C) Electronically Stored Information Produced in Only One Form. The person responding need not produce the same electronically stored

information in more than one form.

(D) Inaccessible Electronically Stored Information. The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) Claiming Privilege or Protection.

(A) Information Withheld. A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation

(i) expressly make the claim; and

(ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.

(B) Information Produced. If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.

The court for the district where compliance is required—and also, after a motion is transferred, the issuing court-may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

Attachment B

Attachment B to Open Text Corporation Subpoena

Definitions

- 1. The term "person" includes without limitation any natural person, firm, association, partnership, corporation, or any other form of legal entity, including but not limited to, associations, organizations, companies, partnerships, joint ventures, corporations, trusts, and estates, and all divisions, departments, and other such units thereof or therein.
- 2. The terms "Open Text," "Open Text Corporation," "you," and "your" mean and includes
- (1) Open Text Corporation and its subsidiaries and divisions, (2) any successors and predecessors thereof, and/or (3) any and all persons or entities acting on Open Text Corporation's behalf, including but not limited to employees, officers, directors, attorneys, agents or representatives thereof, and including Open Text Corporation's distributors, sales and marketing allies, partners or associates.
- 3. The term "Plaintiff" means Plaintiff Steven E. Berkheimer and his attorneys, consultants, investigators, accountants, and all other persons acting on his behalf.
- 4. The term "HP" means HP, Inc., formerly known as defendant Hewlett-Packard Company, and its divisions, departments, affiliates, sister entities and parent entities, including (but not limited to), any persons acting on its behalf and includes all of its predecessors (merged, acquired, or otherwise), successors, and subsidiaries.
- 5. The term "HP Exstream" means HP Exstream software, services, software platforms as well as all modules, iterations or versions thereof and any software or software platform incorporating all or part of the same which were made, imported into, used, sold, or offered for sale, or licensed by Hewlett-Packard Company or its successors in the United States since November 4, 2008.

- 6. The term "all" shall mean "any and all," so as to bring within the scope of a topic listed herein all information that otherwise might be construed to be outside its scope.
- 7. The terms "and" as well as "or" shall be construed disjunctively or conjunctively as necessary to bring within the scope of a topic all information that might otherwise be construed to be outside its scope.
- 8. The term "communication" means any transmission of information from one person to another.
- 9. The term "document" or "documents" shall have the broadest possible meaning permitted by Federal Rules of Civil Procedure 26 and 34 and the relevant case law and shall include, without limitation, any electronically stored information, and any "writings," "recordings" and "photographs" as defined by Federal Rule of Evidence 1001. The terms "document" or "documents" shall include, without limitation, any tangible thing upon which any expression, communication or representation has been recorded by any means including, without limitation, handwriting, typewriting, printing, photostatting, photographing, magnetic impulse, or mechanical or electronic recording and any nonidentical copies (whether different from the original because of notes made on such copies, because of indications that said copies were sent to different individuals than were the originals, or because of any other reason), including, without limitation, working papers, preliminary, intermediate or final drafts, correspondence, memoranda, charts, notes, records, invoices, financial statements or calculations, diaries, reports of telephone or other oral conversations, desk calendars, appointment books, audio or video tape recordings, microfilm, microfiche, computer tape, computer disk, computer printout, computer card, electronic mail, and all other writings and recordings of every kind.

- 10. The terms "concerning," "regarding," "related to," "relate to," or "relating to," and any variants thereof as used herein shall be construed in their broadest sense to mean connected to, referencing, referring to, or identifying, evidencing, constituting, respecting, concerning, pertaining to, based upon, stating, establishing, showing, supporting, contradicting, describing, recording, noting, reflecting, embodying, memorializing, containing, mentioning, studying, analyzing, or discussing, either directly or indirectly any subject matter contained in a request or any communication regarding a subject matter in a request.
- 11. The term "Lawsuit" means the above-captioned action, namely case number 1:12-cv-09023 of the United States District Court for the Northern District of Illinois, Eastern Division.
- 12. The term '713 Patent means U.S. Patent 7,447,713 entitled "System and Method for Archiving and Outputting Documents or Graphical Items" issued on November 4, 2008 from application number 09/977,502 filed October 15, 2001 which claims priority to provisional patent application number 60/240179 filed on October 13, 2000.

Instructions

- A. Unless otherwise specified, the time period covered by each document request is from November 4, 2008 to the present.
- B. Each request contained herein extends to all documents in your possession, custody, or control.
- C. These requests specifically require the production of all responsive documents.
- D. The identification obligations contained in these Instructions do not relieve you of any common law or statutory duty to preserve evidence in this lawsuit. You should preserve all relevant and potentially relevant information regardless of the source of that information and shall take measures to ensure that any processes by which potentially relevant information could be automatically deleted or overwritten shall be suspended until such time as the parties have come to agreements regarding the same.
- E. To the extent that you contend that potentially relevant documents might reside on dynamic databases or other non-static computer systems, you shall identify all such databases or systems with specificity and identify the types of potentially relevant documents that might reside on such databases or systems.
- F. If you assert any privilege in responding to any request, describe in detail in each instance the type of privilege asserted, the basis for the assertion, all facts relied upon in support of the claim of privilege or related thereto, and identify, to the fullest extent short of waiver, all information as to which you claim a privilege. Documents shall not be withheld on the grounds that they contain highly sensitive or confidential information, but instead shall be designated in accordance with the terms of the attached protective order applicable to the Lawsuit, information of which may be obtained from Plaintiff's counsel of record.

- G. If privileged or protected information is inadvertently produced, you may by timely notice assert the privilege or protection and you may obtain return of the materials without waiver. For this reason, you may not avoid or delay production obligations based on blanket, non-specific assertions of privilege or other protection.
- H. If, after making your initial production and inspection, you obtain or become aware of any further Documents responsive to these requests, you are required to produce such additional documents to Plaintiff's counsel in this Lawsuit pursuant to Rule 26(e) of the Federal Rules of Civil Procedure.
- I. In construing any document request, the singular form of a word shall be interpreted as plural and plural as singular as necessary to bring within the scope of the request any information or documents which might otherwise be construed to be outside its scope.
- J. In construing any document request, whenever appropriate, "and" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the request any information which might otherwise be construed to be outside its scope; and "all" shall mean "any and all," unless the context requires otherwise.
- K. Each document request shall be construed independently and not with reference to any other request herein for purposes of limitation, unless a request so specifies.

DEPOSITION TOPICS

- 1. The facts, circumstances, and chronology relating to your acquisition of HP Exstream.
- 2. The facts, circumstances, and chronology relating to your due diligence in acquiring HP Exstream.
- 3. The facts, circumstances, and chronology regarding your communications with HP Inc. concerning your acquisition of HP Exstream.
- 4. The facts, circumstances, and chronology regarding your investigation, evaluation or analysis of HP Exstream.
- 5. The facts, circumstances, and chronology regarding any investigation, evaluation or analysis of the '713 Patent.
- 6. The facts, circumstances, and chronology regarding any communication or information referencing or relating to Steven E. Berkheimer or his '713 Patent.
- 7. The facts, circumstances, and chronology regarding any communication or information referencing or relating to the Lawsuit.
- 8. The facts, circumstances, and chronology regarding any agreement(s) between Open Text (and/or its affiliates) and HP Inc., formerly known as Hewlett-Packard Company, (and/or its predecessors, and affiliates) pertaining to HP Exstream, including, but not limited to, any sale, license, acquisition, asset transfer, contract, schedules, exhibits, representations, warranties, indemnifications, IP schedules, valuations, financial disclosures, pricings, provisions of contingencies, hold-back of monies, and litigation references relative the same.
- 9. The facts, circumstances, and chronology regarding any removal of functionality from HP Exstream.

- 10. The facts, circumstances, and chronology regarding any modification, alteration, disassembly and/or decompiling of source code of HP Exstream.
- 11. Any document or communication produced in response to Attachment A.
- 12. The location, maintenance, and efforts undertaken to search for documents and communications referenced in Attachment A.

EXHIBIT C

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

STEVEN E. BERKHEIMER,

Plaintiff,

No. 12-9023

v.

Judge John Z. Lee

HEWLETT-PACKARD COMPANY,

Defendant.

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Pursuant to Federal Rule of Civil Procedure 15(a)(1)(B), Plaintiff, Steven E. Berkheimer ("Berkheimer") for his First Amended Complaint against Defendant Hewlett-Packard Company ("HP") alleges as follows:

Nature of the Action

1. This is a patent infringement action arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*, in which Plaintiff asserts that his U.S. Patent 7,447,713 ("System and Method for Archiving and Outputting Documents or Graphical Items," the '713 Patent) has been and continues to be infringed by Defendant HP.

The Parties

2. Plaintiff Berkheimer is an individual and former resident of Libertyville, Illinois and owns all right, title, and interest in, and has standing to sue for infringement of the '713 Patent.

3. Defendant HP is a Delaware corporation with its principal place of business at 3000 Hanover Street, Palo Alto, California 94304-1185. HP does regular business in this judicial district, including providing products and services in this judicial district accused of infringing the '713 Patent.

Jurisdiction and Venue

- 4. Exclusive original jurisdiction over the subject matter of this action is conferred on this Court under 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq*.
- 5. Venue properly lies in the Northern District of Illinois under 28 U.S.C. §§ 1391(b) and (c), and 1400(b), in that a substantial part of the acts and events giving rise to Plaintiff's claims occurred in this judicial district, including, but not limited to, Defendant having committed infringing acts in this District and the Defendant "residing" in this District in the sense that it is subject to personal jurisdiction here. Venue is also appropriate because Defendant does business in Illinois, including the commission in Illinois of one or more of the infringing acts of offering for sale, selling, using infringing products, or providing infringing services and support to Defendant's customers in Illinois, which Defendant does through established distribution channels.
- 6. Personal jurisdiction over HP is proper in this District because HP is qualified and registered to do business in the State of Illinois as Hewlett-Packard Company and may be served by its registered agent at CT Corporation System, 208 South LaSalle Street, Suite 814, Chicago, Illinois 60604. Defendant HP has established contacts with this forum and purposefully availed itself of this jurisdiction by committing and continuing to commit acts of patent infringement, or inducing or contributing to others doing so, in Illinois.

The Defendant's Infringement of U.S. Patent 7,447,713

- 7. On November 4, 2008, United States Patent No. 7,447,713 (the '713 Patent), entitled "System and Method for Archiving and Outputting Documents or Graphical Items" was legally issued by the United States Patent and Trademark Office to inventor Steven E. Berkheimer of Libertyville, Illinois. (A copy of the '713 Patent and a Certificate of Correction thereof is attached as Exhibit A.)
- 8. Plaintiff is the owner of the entire right, title, and interest in the '713 Patent with full rights to sue for the past and current infringement, and to enjoin further infringement, of the '713 Patent.
- 9. On information and belief, Defendant HP has been and is now making, using, selling, and offering for sale within this Judicial District and throughout the United States enterprise document automation software and platforms, including unauthorized products and services such as HP EXSTREAM that are covered by at least one or more of the '713 Patent independent Claims 1 and 10 and at least one or more of the '713 Patent dependent Claims, such as Claim 18, and hence directly infringe Plaintiff's '713 Patent. HP EXSTREAM is designed and marketed to be used in combination with a variety of HP commercial products and services.
- 10. HP EXSTREAM is designed and marketed to be used with existing IT environments, corporate systems, applications, enterprise systems, and content management systems of HP EXSTREAM users and customers, and others.
- 11. On information and belief, Defendant HP has been and is now actively inducing the infringement of the '713 Patent by, among other things, making, distributing, selling, or offering for sale in the United States unauthorized products and services, such as HP EXSTREAM and its related documentation, user guides and manuals, training services, and

EXSTREAM users and customers, and others (direct infringers) to use the products and services in a manner infringing at least one or more of the '713 Patent independent Claims 1 and 10 and at least one or more of the '713 Patent dependent Claims, such as Claim 18. HP has had knowledge of the '713 Patent since at least November 12, 2012 and possessed and continues to possess the specific intent to induce the foregoing infringement by its users and customers, and others. HP continues and will continue to commit acts with knowledge of the '713 Patent that constitutes knowing and intentional inducement of infringement of the '713 Patent by others in violation of 35 U.S.C. § 271(b) unless and until enjoined by this Court.

- 12. On information and belief, Defendant HP has been and is now contributing to the infringement of the '713 Patent by users, customers, and others, by selling or offering for sale in the United States component products and services such as HP EXSTREAM that are not staple articles or commodities of commerce suitable for substantial non-infringing use and are especially made, designed and/or adapted for use in combinations or to perform methods infringing at least one or more of the '713 Patent independent Claims 1 and 10 and at least one or more of the '713 Patent dependent Claims, such as Claim 18. HP has had knowledge of the '713 Patent since at least November 12, 2012 and possessed and continues to possess the specific intent to contribute to the foregoing infringement by others. HP continues and will continue to commit acts with knowledge of the '713 Patent that constitutes contributory infringement of the '713 Patent by others in violation of 35 U.S.C. § 271(c) unless and until enjoined by this Court.
- 13. On information and belief, HP's actions constitute infringement of the '713 Patent under at least 35 U.S.C. §§ 271(a), (b), and (c). Such acts of infringement have been and are continuing to be committed in Illinois and elsewhere in the United States. Plaintiff is entitled

to compensatory damages from HP under 35 U.S.C. § 284 in addition to other relief requested below.

14. By reason of the foregoing unlawful acts of Defendant HP, Plaintiff has been seriously and irreparably damaged and, unless Defendant is restrained from continuing such unlawful acts, Plaintiff will continue to be so damaged. Plaintiff is without adequate remedy at law to compensate him for the injury caused by Defendant's acts of infringement.

Relief Sought

WHEREFORE, Plaintiff Steven E. Berkheimer prays for judgment against Defendant Hewlett-Packard Company and against its subsidiaries, affiliates, agents, servants, employees, and all others in active concert or participation with them granting the following relief:

- A. A finding United States Patent No. 7,447,713 is valid, enforceable, and infringed by Defendant HP;
- B. A permanent injunction against Defendant HP and its officers, agents, servants, employees, successors, assigns, parents, subsidiaries, affiliates, and all others controlling, controlled by, affiliated with, in privity with, or in active concert or participation with them from infringing or inducing infringement of the '713 Patent;
- C. An award to Plaintiff of damages adequate to compensate him for the infringement of the '713 Patent that has occurred together with pre-judgment and post-judgment interest;
 - D. An award to Plaintiff of all further and proper relief under 35 U.S.C. § 284;
- E. An award to Plaintiff all further and proper relief under 35 U.S.C. § 285, including Plaintiff's costs, disbursements, and attorneys' fees for this action; and
 - F. Such other and further relief as this Court deems just and appropriate.

Jury Demand

Plaintiff demands a trial by jury on all issues so triable.

Plaintiff Steven E. Berkheimer

By:/s/___James P. Hanrath_ One of his Attorneys

James P. Hanrath (IL. ARDC No. 3123374) jhanrath@muchshelist.com

Michael J. Femal (IL. ARDC No. 0792012) mfemal@muchshelist.com

MUCH SHELIST, P.C. 191 North Wacker Drive, Suite 1800 Chicago, Illinois 60606 (312) 521-2000

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing document was served via CM/ECF on January 11, 2013 upon all counsel of record.

/s/ James P. Hanrath

EXHIBIT D

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

Steven E. Berkheimer,)	
)	
Plaintiff,)	12 C 9023
)	
v.)	Judge John Z. Lee
)	
Hewlett-Packard Company,)	
)	
Defendant.)	

MEMORANDUM OPINION AND ORDER

Plaintiff Steven E. Berkheimer ("Berkheimer") has sued Defendant Hewlett-Packard Company ("HP") under 35 U.S.C. § 1 et seq., alleging infringement of U.S. Patent No. 7,447,713 ("the '713 Patent"). HP has moved for summary judgment on the ground that the asserted claims of the '713 Patent cover patent-ineligible subject matter and are therefore invalid under 35 U.S.C. § 101. For the reasons provided herein, the Court grants HP's motion.

Factual Background

Berkheimer is the owner of the '713 Patent, which describes methods for digitally processing and archiving files. Pl.'s Resp. HP's SMF, Ex. 2 ("'713 Patent") col.1 ll.10–11, ECF No. 164-2. The methods involve "object-oriented representations" of documents and graphics that are "manipulated and then entered into an archival database with minimal redundancy." *Id.* at col.1 ll.15–19, col.2 l.38. For example, using these methods, a computer program can recognize the various components of a document (such as a headline, text block, or image) and can archive the document by storing data corresponding to each of these separate

components. *Id.* at cols.19–28 (diagramming an example of this archiving process). Once a document has been archived in this manner, multiple users can "work on different components of a document at the same time and from different locations." *Id.* at cols. 39–40. And when multiple documents in the archive share a common component (for example, the same text block), a user can edit those documents simultaneously with a one-time edit to the common component that they share. *Id.* at cols. 41–42. These features of the claimed methods "promote efficiency," "achieve object integrity," and "reduce turnaround time and costs" in the digital archiving process. *Id.* at col.2 ll.38–52, col.3 ll.40–50.

Berkheimer asserts Claims 1–7 and 9 of the '713 Patent against HP. Def.'s SMF ¶¶ 7–8, ECF No. 157.¹ Claim 1 is an independent claim, and Claims 2–7 and 9 are dependent claims deriving from Claim 1. See '713 Patent col. 47. Claim 1 reads as follows:

1. A method of archiving an item in a computer processing system comprising:

presenting the item to a parser;

parsing the item into a plurality of multi-part object structures wherein portions of the structures have searchable information tags associated therewith;

evaluating the object structures in accordance with object structures previously stored in an archive;

2

Previously, Berkheimer also asserted Claims 10–19. However, in a prior ruling, this Court held that Claims 10–19 were invalid for indefiniteness under 35 U.S.C. § 112. Berkheimer v. Hewlett-Packard Co., No. 12-cv-9023, 2015 WL 4999954, at *9–11 (N.D. Ill. Aug. 21, 2015). Claims 1–7 and 9 are therefore the only asserted claims that currently remain. Def.'s SMF ¶ 8.

presenting an evaluated object structure for manual reconciliation at least where there is a predetermined variance between the object and at least one of a predetermined standard and a user defined code.

Id. at col.47 ll.9–21.

During a claim construction hearing, the parties asked the Court to interpret the terms "parser," "parsing," and "evaluating," each of which appears in Claim 1. See Berkheimer, 2015 WL 4999954, at *1. Based on the hearing, the Court concluded that the term "parser" means "a program that dissects and converts source code into object code"; "parsing" means "using a program that dissects and converts source code into object code to dissect and convert"; and "evaluating" means "analyzing and comparing." Id. at *12. The parties also asked the Court to interpret the phrase "evaluating the object structures in accordance with object structures previously stored in an archive," which appears in the third step of Claim 1. The Court defined this phrase to mean "analyzing the plurality of multipart object structures obtained by parsing and comparing it with object structures previously stored in the archive to determine if there is variance between the object and at least one of a predetermined standard and a user defined rule." Id.

Claims 2–7 and 9 are dependent claims that add various steps and limitations to the method recited in Claim 1. They read as follows:

_

[&]quot;Source code" is "nonmachine language used by a computer programmer to create a program." *Black's Law Dictionary* (10th ed. 2014). "Object code" is "machine-readable language compiled from a computer programmer's source code." *Black's Law Dictionary* (10th ed. 2014).

- 2. The method as in claim 1 wherein the respective structure can be manually edited after being presented for reconciliation.
- 3. The method as in claim 1 which includes, before the parsing step, converting an input item to a standardized format for input to the parser.
- 4. The method as in claim 1 which includes storing a reconciled object structure in the archive without substantial redundancy.
- 5. The method as in claim 4 which includes selectively editing an object structure, linked to other structures to thereby effect a one-to-many change in a plurality of archived items.
- 6. The method as in claim 5 which includes compiling an item to be output from the archive, wherein at least one object-type structure of the item has been edited during the one-to-many change and wherein the compiled item includes a plurality of linked object-type structures converted into a predetermined output file format.
- 7. The method as in claim 6 which includes compiling a plurality of items wherein the at least one object-type structure has been linked in the archive to members of the plurality.
- 9. The method as in claim 1 which includes forming object oriented data structures from the parsed items wherein the data structures include at least some of item properties, item property values, element properties and element property values.

'713 Patent, col.47 ll.22–55.

Legal Standard

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). At the summary judgment stage, a court must consider any

disputed facts in the light most favorable to the nonmoving party, drawing all reasonable inferences in the nonmoving party's favor. Anderson v. Liberty Lobby, 477 U.S. 242, 255 (1986); Grochocinski v. Mayer Brown Rowe & Maw, LLP, 719 F.3d 785, 794 (7th Cir. 2013). To survive summary judgment, the nonmoving party must "do more than simply show that there is some metaphysical doubt as to the material facts," Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 (1986), and instead "must establish some genuine issue for trial such that a reasonable jury could return a verdict in her favor." Gordon v. FedEx Freight, Inc., 674 F.3d 769, 772–73 (7th Cir. 2012).

Analysis

In support of its motion for summary judgment, HP's sole contention is that the asserted claims of the '713 Patent are patent-ineligible and thus invalid under 35 U.S.C. § 101. Whether a patent claim is invalid under § 101 is a question of law. CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1369 (Fed. Cir. 2011); In re Bilski, 545 F.3d 943, 951 (Fed. Cir. 2008) (en banc), aff'd, 561 U.S. 593 (2010). Accordingly, courts may resolve questions concerning patent eligibility under § 101 validity on the pleadings or at the summary judgment stage. See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1349 (Fed. Cir. 2014); buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1352 (Fed. Cir. 2014); CLS Bank Int'l v. Alice Corp. Pty. Ltd., 717 F.3d 1269, 1274 (Fed. Cir. 2013), aff'd, 134 S. Ct. 2347 (2014).

Section 101 governs the scope of the federal patent laws. It provides that "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof," is eligible to receive patent protection. 35 U.S.C. § 101. For over 150 years, the Supreme Court has interpreted § 101 and its predecessors to "contain[] an important implicit exception: [l]aws of nature, natural phenomena, and abstract ideas are not patentable." Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014) (quoting Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013)). This exception strikes a balance between protecting truly new and useful inventions, on the one hand, and ensuring that the patent laws do not "improperly [tie] up . . . the building blocks of human ingenuity," on the other. Alice, 134 S. Ct. at 2354 (quoting Mayo Collaborative Servs. v. Prometheus Laboratories, Inc., 132 S. Ct. 1289, 1301 (2012)).

In Alice Corp. Pty. Ltd. v. CLS Bank International, the Supreme Court set forth a two-part framework to determine the patent eligibility of method claims under § 101. 134 S. Ct. at 2355–57. The first part of the framework requires a court to determine whether the claims at issue are drawn to an "abstract idea." Id. If they are, then the second part of the framework directs the court to examine the claims and determine whether they contain "an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." Id. at 2357 (quoting Mayo, 132. S. Ct. at 1294, 1298). "Simply appending conventional steps, specified at a high level of generality, [is] not enough to supply an inventive concept." Alice, 134 S. Ct. at 2357 (internal quotation marks and emphasis

omitted). Likewise, method claims that "merely require generic computer implementation" of an abstract idea do not contain an "inventive concept" sufficient to render them patent-eligible. *Id*.

I. Burden of Proof in Patent-Eligibility Determinations under § 101

Before turning to the merits of HP's motion for summary judgment, the Court must address a threshold question that the Supreme Court and the Federal Circuit have yet to resolve: whether a clear-and-convincing standard of evidentiary proof applies when a claim is challenged as patent-ineligible under § 101. District courts disagree over this issue,³ as do Berkheimer and HP. See Pl.'s Resp. at 2 n.4, ECF No. 163; Def.'s Reply at 14, ECF No. 166.

This disagreement stems from uncertainty about the scope of the Supreme Court's decision in *Microsoft Corp v. i4i Ltd. Partnership*, 564 U.S. 91 (2011), which involved a patent-validity challenge under the on-sale bar of 35 U.S.C. § 102(b). In that case, the Supreme Court held that because a patent must be presumed valid

For examples of cases concluding that the clear-and-convincing evidentiary standard applies in § 101 challenges, see O2 Media, LLC v. Narrative Sci. Inc., 149 F. Supp. 3d 984, 988 (N.D. Ill. 2016) (Tharp, J.): Trading Techs. Int'l, Inc. v. CQG, Inc., No. 05-CV-4811, 2015 WL 774655, at *2-3 (N.D. Ill. Feb. 24, 2015) (Coleman, J.); DataTern, Inc. v. Microstrategy, Inc., No. CV 11-11970-FDS, 2015 WL 5190715, at *7-8 (D. Mass. Sept. 4, 2015) (Saylor, J.); Netflix, Inc. v. Rovi Corp., 114 F. Supp. 3d 927, 938 (N.D. Cal. 2015) (Hamilton, J.); Data Distribution Techs., LLC v. BRER Affiliates, Inc., No. CIV. 12-4878-JBS/KMW, 2014 WL 4162765, at *4 (D.N.J. Aug. 19, 2014) (Simandle, J.). For examples of cases concluding that the clear-and-convincing evidentiary standard does not apply to § 101 challenges, see Am. Needle, Inc. v. Cafe Press Inc., No. 15-CV-3968, 2016 WL 232438, at *3 (N.D. Ill. Jan. 19, 2016) (Darrah, J.); Nextpoint, Inc. v. Hewlett-Packard Co., No. 15 C 8550, 2016 WL 3181705, at *6 (N.D. Ill. June 8, 2016) (Bucklo, J.).; Wireless Media Innovations, LLC v. Maher Terminals, LLC, 100 F. Supp. 3d 405, 410–12 (D.N.J. 2015) (Linares, J.); Shortridge v. Found. Constr. Payroll Serv., LLC, No. 14-CV-04850-JCS, 2015 WL 1739256, at *7 (N.D. Cal. Apr. 14, 2015) (Spero, J.); Modern Telecom Sys. LLC v. Earthlink, Inc., No. SA CV 14-0347-DOC, 2015 WL 1239992, at *7 (C.D. Cal. Mar. 17, 2015) (Carter, J.).

under the federal patent laws, see 35 U.S.C. § 282(a) ("A patent shall be presumed valid."), a party seeking to prove a patent's invalidity must do so by clear and convincing evidence. i4i, 564 U.S. at 95. In a concurring opinion joined by Justices Scalia and Alito, Justice Breyer noted his full agreement with the majority's holding, writing separately only because he "believe[d] it worth emphasizing" that the clear-and-convincing standard is an evidentiary rule applying only "to questions of fact and not to questions of law." Id. at 114 (citing Addington v. Texas, 441 U.S. 418, 423 (1979)). In patent cases, he explained, "a factfinder must use the 'clear and convincing' standard where there are disputes about, say, when a product was first sold or whether a prior art reference had been published." i4i, 564 U.S. at 114. Justice Breyer further emphasized that "[m]any claims of invalidity rest, however, not upon factual disputes, but upon how the law applies to facts as given." Id.

Since its decision in *i4i*, the Supreme Court has issued opinions in several § 101 patent-eligibility cases, but in none of those cases has it addressed or applied the clear-and-convincing standard that was applied to the § 102(b) dispute in *i4i*. See generally Alice, 134 S. Ct. 2347; Myriad, 133 S. Ct. 2107; Mayo, 132 S. Ct. 1289. The Federal Circuit also has not issued a controlling decision on the question whether the clear-and-convincing standard applies to § 101 determinations. See Tranxition, Inc. v. Lenovo (U.S.) Inc., No. 2015-1907, 2016 WL 6775967, at *4 n.1 (Fed. Cir. Nov. 16, 2016) ("We [] do not address the proper evidentiary standard in this [§ 101] case as there do not appear to be any material facts in dispute."); Listingbook, LLC v. Market Leader Inc., 144 F. Supp. 3d 777, 783 (M.D.N.C. 2015)

(noting the lack of controlling precedent and reviewing the conflicting dicta on this subject from "concurring, dissenting, and now-vacated opinions" authored by various Federal Circuit judges).

In the absence of explicit guidance from either the Supreme Court or the Federal Circuit, some district courts have concluded that the clear-and-convincing standard indeed applies to all § 101 determinations. Their conclusion, they reason, is supported by the broad language of the i4i majority opinion, which seems to address patent-validity challenges writ large and does not expressly limit the application of the clear-and-convincing evidentiary standard to any particular context. See, e.g., DataTern, 2015 WL 5190715, at *7 (citing i4i, 564 U.S. at 95); Trading Techs., 2015 WL 774665, at *3. Other district courts, however, have distinguished § 101 challenges from other types of patent-validity issues and have concluded that i4i's clear-and-convincing standard does not apply to the § 101 inquiry, given that patent eligibility is a matter of law rather than fact. See, e.g., Wireless Media, 100 F. Supp. at 410–12; Nextpoint, 2016 WL 3181705, at *6 (internal quotation marks omitted) ("[T]he 'clear and convincing' standard is an evidentiary standard that applies only to the resolution of factual disputes, and not to resolution of pure issues of law. ... [T]he Federal Circuit has made clear that subject matter eligibility is a question of law.").

Having considered the positions on both sides of this issue, the Court is persuaded that the clear-and-convincing standard has no role to play in the § 101 determination at issue in this case. This conclusion is consistent with the decision

in *i4i*, which concerned factual issues pertaining to a § 102(b) patent-validity dispute and thus is not directly on point with regard to § 101. See *i4i*, 564 U.S. at 114 (Breyer, J., concurring). It also comports with the Supreme Court's and Federal Circuit's consistent treatment of § 101 patent eligibility as a threshold question of law, see, e.g., Bilski, 545 F.3d at 951 (en banc), and it draws sound support from the *i4i* concurring justices' emphasis on the key difference between issues of law versus issues of fact in applying the clear-and-convincing standard. *i4i*, 564 U.S. at 114 (Breyer, J., concurring). Finally, while it may be true that nothing can be "conclusively read into the Supreme Court's silence in its four recent opinions under section 101," DataTern, 2015 WL 5190715, at *7, the fact that the Supreme Court has made no mention of the clear-and-convincing standard in any of its patent-eligibility decisions since *i4i* suggests that the standard was not meant to extend to the § 101 inquiry. For these reasons, this Court finds that the clear-and-convincing standard does not apply to HP's § 101 challenge.

This conclusion is entirely consistent with the Supreme Court's holding in *i4i*. District court decisions to the contrary seem to be premised on the notion that the clear-and-convincing standard espoused in *i4i* must be applied categorically and without exception whenever a court considers a patent's validity (or invalidity). But this is simply not the case when it comes to questions of patent eligibility under § 101, which do not involve the resolution of any factual issues. Indeed, courts regularly make § 101 determinations based upon motions to dismiss or motions for judgment on the pleadings, *see*, *e.g.*, *Content Extraction*, 776 F.3d at 1349;

buySAFE, 765 F.3d at 1352; Alice, 717 F.3d at 1274, aff'd, 134 S. Ct. 2347 (2014), at which stage all facts must be construed in the nonmovant's favor, see Ashcroft v. Iqbal, 556 U.S. 662, 679 (2009); Bell Atl. Corp. v. Twombly, 550 U.S. 544, 555–56 (2007). It is difficult to see what application the clear-and-convincing evidentiary standard would have in these contexts. In short, because there are no factual issues to be resolved in the course of the § 101 inquiry, at least as that inquiry has been structured under Alice, there are no factual issues to which the clear-and-convincing evidentiary standard might be pertinent. For this reason, it is entirely consistent with the Supreme Court's decision in i4i to conclude that, while the clear-and-convincing standard applies to evidentiary disputes arising in patent validity challenges in general, it has no bearing on the § 101 inquiry.

It is nevertheless instructive to note that even if the Court were to reach the opposite conclusion, the disposition of HP's motion for summary judgment would be unaffected. To undertake the § 101 inquiry in this case, the Court need only consider the asserted claims of the '713 Patent, in light of the claim construction order, and apply Alice's two-part test to those claims; no inquiry into underlying factual information is needed. See Content Extraction, 776 F.3d at 1349 (holding that § 101 determinations may be made at the pleading stage, prior to development of the factual record); Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 714–15 (Fed. Cir. 2014) (applying the two-part Alice framework by conducting an "examination of the claim limitations" on their face). There are therefore no reasonably disputable material facts in this case to which the clear-and-convincing standard might be

applied.⁴ *Cf. 01 Communique Lab., Inc. v. Citrix Sys., Inc.*, 151 F. Supp. 3d 778, 787 (N.D. Ohio 2015) (explaining that disagreements about the application of the *Alice* framework "do not constitute disputes of fact subject to an evidentiary standard of proof").

Having addressed this threshold question and concluded that the clear-and-convincing standard does not—indeed, could not—apply to the present issues in this case, the Court now turns to the merits of HP's motion for summary judgment.

II. "Abstract Idea" Analysis

In support of its motion, HP argues that the asserted claims of the '713 Patent are patent-ineligible under *Alice* because they are directed to the noninventive abstract idea of "reorganizing data (e.g. a document file) and presenting the data for manual reconciliation." Def.'s Br. at 1–2. Berkheimer disagrees with HP's characterization of the claims, contending that HP "does not account for the [claims'] core elements and limitations." Pl.'s Resp. at 4.

Berkheimer incorrectly treats the issues of whether a claim is directed to an "abstract idea" and whether a claim contains an "inventive concept" as factual questions to which the clear-and-convincing standard should apply. See Pl.'s Resp. at 2 & n.4. Relatedly, Berkheimer argues that HP's Local Rule 56.1 Statement contains insufficient information to support a finding for HP on these "factual" questions. *Id.* at 15. But as noted above, the "abstract idea" and "inventive concept" analyses speak to matters of law. As such, Berkheimer's arguments about the sufficiency of HP's Local Rule 56.1 Statement are unavailing.

HP further argues that the asserted claims would have also been patent-ineligible under the pre-Alice "machine-or-transformation" test for patent eligibility. See Def.'s Br. at 14–15, ECF No. 155-1. But as the Federal Circuit has explained, "it is clear today" that the machine-or-transformation test is not dispositive of the patent eligibility of computer-implemented method claims post-Alice. DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1255–56 (Fed. Cir. 2014). HP's alternative machine-or-transformation argument is therefore only an ancillary issue that the Court need not address.

Under the first step of *Alice*, the Court must determine whether the claims at issue are directed to an abstract idea. 134 S. Ct. at 2355–57. *Alice* itself did not "delimit the precise contours" of what constitutes an "abstract idea," *id.* at 2357, and "it is not always easy to determine the boundary between abstraction and patent-eligible subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1347 (Fed. Cir. 2015). Thus, the Court must rely upon "[r]ecent precedent illustrat[ing] this boundary in a variety of factual circumstances." *Id.* In determining whether a claim is drawn to an abstract idea, it is "sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

As stated above, Claim 1 of the '713 Patent, which the Court treats as representative, recites "[a] method of archiving an item in a computer processing system" comprising four steps.⁶ First, a document or graphic must be "presented" to a "parser," which can be any computer program that converts source code into object

The Court treats Claim 1 as representative for two reasons. First, Claim 1 is the only independent claim that Berkheimer asserts. The remaining asserted claims are dependent claims that add only minor limitations and that are directed to the same core set of features as Claim 1. See Content Extraction, 776 F.3d at 1348 (holding that the district court "correctly determined that addressing each claim of the asserted patents was unnecessary" when all claims were "substantially similar and linked to the same abstract idea"). Second, Berkheimer himself treats Claim 1 as representative by focusing all of his primary arguments on Claim 1's language. See Pl.'s Resp. at 5–13. Berkheimer includes a short paragraph in which he asserts that Claim 1 is not representative, but this assertion is conclusory. Id. at 13. Berkheimer advances no arguments persuading the Court that "any limitation in any of the dependent claims . . . bears on the [Alice] inquiry." Nextpoint, 2016 WL 3181705, at *3 n.2 (treating an independent claim as representative of the dependent claims where plaintiff failed to advance arguments that the independent claim was not representative).

code. Second, the program processes the document by "parsing" it into "a plurality of multi-part object structures," some of which are given "searchable information tags." Third, these object structures are analyzed and compared to "object structures previously stored in the archive." At this step of the process, predetermined standards and user-defined rules instruct the computer program regarding the types of comparisons to make. Fourth, and finally, the object structures are "presented" for "manual reconciliation" to correct any errors or "variance," also in accordance with predetermined standards and user-defined rules. '713 Patent, col. 47 ll.9–21.

At their core, these four steps describe instructions for using a generic computer to collect, organize, compare, and present data for reconciliation prior to archiving. Claims that are based on these types of conventional data-gathering activities are unquestionably directed to an abstract idea under the first part of the Alice framework, as the Federal Circuit has concluded in examining claims similar to those at issue here. For example, in Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343 (Fed. Cir. 2014), the Federal Circuit considered claims that it summarized as reciting a method for "extracting data from hard copy documents using an automated digitizing unit such as a scanner," "recognizing specific information from the extracted data," and "storing that information in a memory" to allow an ATM to recognize information on checks. Id. at 1345. In holding the claims patent-ineligible under § 101, the court characterized them as directed to the "indisputably well-known" abstract idea of "collecting" data,

"recognizing" certain data within the collected data set, and "storing that recognized data in a memory." *Id.* at 1347.

Although they operate in the context of archiving rather than consumer banking, the asserted claims of the '713 Patent are closely analogous to the claims in Content Extraction because they are also directed to the abstract idea of collecting and analyzing stored data. Berkheimer disagrees, arguing that the claims are not abstract because they include "transformative" core features such as a "parser," "searchable information tags," and the instruction to "parse" documents into "a plurality of multi-part object structures." Pl.'s Resp. at 5. But these features involve conventional data-gathering steps that are not meaningfully distinguishable from the core features of the claims in Content Extraction. Nor are they meaningfully distinguishable from the numerous other claimed methods of gathering, organizing, analyzing, or displaying data that the Federal Circuit has held to be directed to patent-ineligible abstract ideas. See FairWarning IP, LLC v. *Iatric Systems, Inc.*, No. 2015-1985, 2016 WL 5899185, at *1 (Fed. Cir. Oct. 11, 2016) (method for detecting fraud by recording patient data, analyzing the data according to predetermined rules, and creating notifications upon detection of misuse was patent-ineligible); Elec. Power Grp. v. Alstrom S.A., 830 F.3d 1350, 1351–52 (Fed. Cir. 2016) (method for "performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results" was patent-ineligible); In re TLI Commc'ns LLC Patent Litig., 823 F.3d 607, 609-10 (Fed. Cir. 2016) (method for assigning

classification data to digital images and organizing the images on a server based on the classification information was patent-ineligible); OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1360–62 (Fed. Cir. 2015) (method for using various "data-gathering steps" to enable automated price-optimization of products for sale was patent-ineligible); buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1351–55 (Fed. Cir. 2014) (method of using data-gathering functions of a computer program to facilitate commercial transactions was patent-ineligible); Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344, 1347, 1350–51 (Fed. Cir. 2014) (method for "creating a device profile within a digital image processing system" by gathering data and "organizing this [data] into a new form" was patent-ineligible). These Federal Circuit precedents provide abundant support for the conclusion that Claim 1 of the '713 Patent, which describes steps for collecting, organizing, comparing, and presenting data, is directed to an abstract idea under Alice.

The additional steps described in the asserted dependent claims are likewise drawn to abstract ideas. Specifically, Claim 2 adds to Claim 1 by allowing a human to "manually edit[]" items. Claim 3 recites the step of converting data to a "standardized format" before inputting it into the generic program described in Claim 1. Claim 4 recites "storing a reconciled object structure in the archive without substantial redundancy"—in other words, efficiently storing information in an archive. Claim 5 recites editing items by copying a one-time change across multiple archived items. In turn, Claim 6 recites the output of an item edited as

described in Claim 5, and Claim 7 recites the output of not one but a "plurality" of such items. Finally, Claim 9 adds to Claim 1 by reciting the step of compiling data in a computer archive. '713 Patent, col.47 ll.22–55. These dependent claims do not place any meaningful limitation on the method described in Claim 1, because they are drawn to the abstract ideas of editing data manually (Claims 2 and 5), formatting and storing data (Claims 3, 4, and 9), and editing data in a straightforward copy-and-paste fashion (Claims 5, 6, and 7). *Cf. Elec. Power Grp.*, 830 F.3d at 1351–52; *Content Extraction*, 776 F.3d at 1345–47.

In disputing that the asserted claims are drawn to abstract ideas, Berkheimer relies on the Federal Circuit's recent decision in *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). In *Enfish*, the Federal Circuit considered a claim describing "an innovative logical model for a computer database" containing a "self-referential property." *Id.* at 1330. This "self-referential" logical model had two features not found in conventional database models: it was capable of "stor[ing] all entity types in a single table," rather than requiring separate tables, and it could "define the table's columns by rows in that same table," thus giving the model its "self-referential" property. *Id.* at 1332; *see also id.* at 1330–34 (comparing the structure of conventional versus self-referential logical models in further detail). The court concluded that the claim was not directed to a mere "abstract idea" because it was "focus[ed] . . . on the specific asserted improvement in computer capabilities (i.e. the self-referential table for a computer database)." *Id.* at 1336.

Pointing to this holding, Berkheimer contends that *Enfish* stands for the farreaching proposition that "any improvement to computer functionality itself bypasses the Alice step 1 abstract idea ineligibility exception." Pl.'s Not. Supplemental Authority at 1, ECF No. 165. Berkheimer's argument relies on a misreading of *Enfish*. It is true that the *Enfish* court characterized the first step of Alice as an inquiry into whether the claims at issue were "directed to an improvement to computer functionality versus [] directed to an abstract idea." Enfish, 822 F.3d at 1335. But Enfish did not go so far as to hold that any method purporting to improve computer functionality is patent-eligible under Alice. See id. (explaining that only "some improvements in computer-related technology" are "not abstract, such as a chip architecture, an LED display, and the like") (emphasis added). Moreover, the decision did nothing to unsettle past Federal Circuit case law holding that claims calling for the addition of "conventional computer components to well-known business practices" are drawn to an abstract idea, id. at 1338, even when those claims purport to improve computer functionality through increased speed or efficiency. See, e.g., Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1367 (Fed. Cir. 2015) ("Nor, in addressing the second step of Alice, does claiming the improved speed or efficiency inherent with applying the abstract idea on a computer provide a sufficient inventive concept."); Digitech, 758 F.3d at 1347–48 (holding that a method claim reciting an "abstract process of gathering and combining data" was patent-ineligible even though it aimed to improve the accuracy of imaging devices). Here, the claims in the '713 Patent purport to improve digital

archiving by "promot[ing] efficiency," "achiev[ing] object integrity," and "reduc[ing] turnaround time and costs." '713 Patent, col.2 ll.38–52, col.3 ll.40–50. These types of generic technological improvements can result from virtually any computer implementation of conventional business methods. The Court therefore disagrees with Berkheimer that its claims are directed to the kinds of specific, concrete, nonconventional improvements that made the claims in *Enfish* patent-eligible.

The asserted claims of the '713 Patent are distinguishable from the Enfish claims in other ways as well. In *Enfish*, the claims at issue provided a specific, stepby-step algorithm instructing how to set up the self-referential data table covered by the plaintiff's patent. Enfish, 822 F.3d at 1336–37 (providing the relevant claim language); id. at 1337 ("Here, the claims are not simply directed to any form of storing tabular data, but instead are specifically directed to a self-referential table for a computer database."). In contrast, the claims of the '713 Patent provide broadly phrased instructions to "present" a document to a parser, "parse" the document, "evaluate" the document after it has been parsed, and "present" the evaluated data to a person for "manual reconciliation." '713 Patent, col.47 ll.9-21. They offer no specific guidance as to how one might actually create a computer program or a computer processing system capable of carrying out these generic tasks. Cf. TLI, 823 F.3d at 612–15 (distinguishing Enfish on similar grounds and holding that a method claim for a server "described simply in terms of performing generic computer functions such as storing, receiving, and extracting data" was directed to a patent-ineligible abstract idea). In light of these significant differences

in the nature of the asserted claims, the Court finds that *Enfish* does not control the outcome of this case.

III. "Inventive Concept" Analysis

Because the representative claim of the '713 Patent is directed to the abstract idea of collecting, organizing, comparing, and presenting data, the Court must next consider whether the claims contain an "inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Alice*, 134 S. Ct. at 2357 (internal quotation marks omitted). Berkheimer argues that the claims include an inventive concept because they solve a problem "necessarily rooted in computer technology" and because they are "innovative enough to override the routine and conventional use of the computer." Pl.'s Resp. at 6.

Berkheimer's arguments are framed in language drawn from the Federal Circuit's decision in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). In that case, the Federal Circuit considered a computer-implemented method patent that claimed "systems and methods of generating a composite web page that combine[d] certain visual elements [such as logos, colors, and fonts] of a 'host' website with content of a third-party merchant." *Id.* at 1248. Upon "activation of a hyperlink on a host website," these systems directed web users to a composite website that "retain[ed] the host website's 'look and feel," rather than taking users to a website wholly separate from the site of the original host. *Id.* at 1248–49. The Federal Circuit held that these methods included an inventive concept because they described a "solution [] necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of

computer networks" (namely, the problem of retaining website visitors) and because they "overr[ode] the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." *Id.* at 1257–58.

Berkheimer compares his claims to the claims in *DDR Holdings* by emphasizing that the '713 Patent "present[s] solutions to problems in computerized digital asset management systems, including: redundancy, one-to-many editing, and efficient digital asset control and usage." Pl.'s Resp. at 7. Yet this description of the claims undercuts Berkheimer's own argument that the claims solve problems "necessarily rooted in computer technology." *Id.* at 6. The need to minimize redundancy in archival systems and to increase efficiency in editing, control, and usage of archived items is a challenge that by no means arises uniquely in the field of computer technology. Rather, it is a challenge that arises in any archival system, regardless of whether a computer is involved.

Moreover, instead of describing a process that overrides the routine and conventional use of a computer, each of the independent and dependent claims describes steps that employ only "well-understood, routine, and conventional" computer functions. *Content Extraction*, 776 F.3d at 1348 (citing *Alice*, 134 S. Ct. at 2359). Conventional steps limited to a "particular technological environment" and involving the use of a generic computer program to collect, store, analyze, edit, or present data do not contain an inventive concept sufficient to render the claims patent-eligible. *Alice*, 134 S. Ct. at 2358 (quoting *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010)); *see also Tranxition*, 2016 WL 6775967, at *3 (holding that method

claims for automatically migrating user information between two computers did not include an inventive concept, even though the computers performed the task differently than a human); Content Extraction, 776 F.3d at 1347–48 (holding that method claims did not include an inventive concept when they focused primarily on computerized "data collection, recognition, and storage"); Digitech, 758 F.3d at 1351 (holding that claims did not contain an inventive concept when they described a method for digitally "gathering and combining data" and "organizing this information into a new form"). Berkheimer's arguments based on DDR Holdings are therefore unpersuasive.

Finally, Berkheimer contends that the asserted claims are inventive because they are written with the "requisite degree of specificity." Pl.'s Resp. at 6, 8. This last argument is likewise unpersuasive. The claims of the '713 Patent, while rife with technical terms, recite the claimed methods at a relatively high level of generality. They neither disclose a specific algorithm instructing how the methods are to be implemented nor require the use of any particular computer hardware,

Based on its own review of the Federal Circuit's recent decisions, the Court concludes that

After the briefing on the present motion for summary judgment concluded, the Federal Circuit decided numerous § 101 cases, three of which involved method claims deemed to be patent-eligible. See Amdocs (Israel) Ltd. v. Openet Telecom, Inc., No. 2015-1180, 2016 WL 6440387, at *1, 9–15 (Fed. Cir. Nov. 1, 2016) (methods of metering network bandwidth usage were patent-eligible); McRO, Inc. v. Bandai Namco Games Am. Inc., No. 2015-1080, 2016 WL 4896481, at *7–10 (Fed. Cir. Sept. 13, 2016) (method of programming a computer to produce accurate "lip synchronization and facial expressions in animated characters" was patent-eligible); Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1351–52 (Fed. Cir. 2016) (method for "filter[ing] content on the Internet that overcomes existing problems with other Internet filtering systems" was patent-eligible).

software, or "parser." As such, "[t]hough lengthy and numerous, the claims do not go beyond requiring the collection, analysis, and display of available information" in the field of digital archiving, "stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology." *Elec. Power*, 830 F.3d at 1351. Without offering a specific, concrete contribution to the technology of digital archiving, the asserted independent and dependent claims cannot be said to contain an inventive concept rendering them patent-eligible.

Conclusion

For the reasons stated herein, the Court finds that Claims 1–7 and 9 of the '713 Patent are invalid for lack of patent eligibility under 35 U.S.C. § 101. Defendant Hewlett-Packard Company's motion for summary judgment [155] is therefore granted. This case is hereby terminated.

IT IS SO ORDERED.

ENTERED 12/12/16

John Z. Lee

United States District Judge

EXHIBIT E

Steven E. BERKHEIMER, Plaintiff-Appellant

v.

HP INC., fka Hewlett-Packard Company, Defendant-Appellee

2017-1437

United States Court of Appeals, Federal Circuit.

Decided: February 8, 2018

Background: Patentee brought action for infringement of patent that described methods for digitally processing and archiving files. The United States District Court for the Northern District of Illinois, No. 1:12-cv-09023, John Z. Lee, J., 2015 WL 4999954 and 224 F.Supp.3d 635, construed patent, ruled claims were invalid, and granted summary judgment to alleged infringer. Patentee appealed.

Holdings: The Court of Appeals, Moore, Circuit Judge, held that:

- district court did not clearly err in finding, based on alleged infringer's expert declaration, that term "minimal redundancy" was indefinite;
- (2) patent claims were directed to abstract ideas of parsing, comparing, storing, and/or editing data; but
- (3) genuine issue of material fact existed as to whether some of those claims contained transformative inventive concent

Affirmed in part, vacated in part, and remanded.

1. Patents \$\infty\$1970(3)

Court of Appeals reviews indefiniteness determinations in a patent infringement action de novo except for necessary subsidiary fact findings, which are reviewed for clear error. 35 U.S.C.A. § 112.

2. Patents \$\sim 817\$

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C.A. § 112.

3. Patents \$\sim 816\$

Lack of definiteness renders patent claims invalid. 35 U.S.C.A. § 112.

4. Patents \$\sim 816\$

Patent claims, viewed in light of the specification and prosecution history, must inform those skilled in the art about the scope of the invention with reasonable certainty. 35 U.S.C.A. § 112.

5. Patents \$\sim 822\$

District court did not clearly err in finding, based on alleged infringer's expert declaration in infringement action, that term "minimal redundancy" was indefinite, and thus rendered invalid claim in patent describing methods for digitally processing and archiving files; claim language was not reasonably clear as to what level of redundancy was acceptable for archive, specification used inconsistent terminology to describe level of redundancy, prosecution history did not add clarity, and alleged infringer's expert opined that, given this lack of explanation and specific examples of term, patent did not inform skilled artisan of meaning of minimal redundancy with reasonable certainty. 35 U.S.C.A. § 112.

6. Courts \$\sim 96(7)\$

In patent appeals, the law of the regional circuit applies to issues not unique to patent law.

7. Patents \$\sim 1970(4)\$

Patent eligibility is ultimately an issue of law that Court of Appeals reviews de novo. 35 U.S.C.A. § 101.

8. Patents \$\infty 471\$

Patent eligibility inquiry may contain underlying issues of fact.

9. Patents \$\sim 441\$

Courts may treat a patent claim as representative of patent eligibility in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative. 35 U.S.C.A. § 101.

10. Patents \$\sim 1957\$

Patentee preserved argument that dependent claims were separately patent eligible, on appeal from summary judgment for alleged infringer in action for infringement of patent that described methods for digitally processing and archiving files, where patentee maintained that limitations included in dependent claims bore on patent eligibility and he never agreed to make independent claim representative, but, to the contrary, made arguments addressed to reducing redundancy and enabling one-to-many editing that were not recited in independent claim. 35 U.S.C.A. § 101.

11. Patents €=452

Because patent protection does not extend to claims that monopolize the building blocks of human ingenuity, claims directed to laws of nature, natural phenomena, and abstract ideas are not patent eligible. 35 U.S.C.A. § 101.

12. Patents \$\infty 452, 455

To distinguish between claims that claim patent ineligible subject matter and those that integrate the building blocks of human ingenuity into something more, court first determines whether the claims at issue are directed to a patent-ineligible concept, and if so, court considers the elements of each claim both individually and

as an ordered combination to determine whether the additional elements transform the nature of the claim into a patenteligible application. 35 U.S.C.A. § 101.

13. Patents €=460

Claims in patent for methods for digitally processing and archiving files were directed to abstract ideas of parsing, comparing, storing, and/or editing data, and thus claims were patent ineligible absent additional inventive concept; specification described parser that determined and extracted components of standardized document or item representation and reassembled components into composite output files, and while parser transformed data from source to object code, this did not demonstrate non-abstractness without improvement in computer functionality. 35 U.S.C.A. § 101.

14. Patents \$\sim 455\$

Claims directed to abstract idea contain inventive concept and thus are patent eligible when the claim limitations involve more than performance of well-understood, routine, and conventional activities previously known to the industry.

15. Patents \$\sim 455\$

In determining whether claims directed to abstract idea contain inventive concept and thus are patent eligible, determinative question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact. 35 U.S.C.A. § 101.

16. Patents €=1119

Any fact that is pertinent to patent invalidity conclusion must be proven by clear and convincing evidence. 35 U.S.C.A. § 101.

17. Patents \$\sim 471\$

Like indefiniteness, enablement, or obviousness, whether a claim recites patent eligible subject matter is a question of law which may contain underlying facts. 35 U.S.C.A. § 101.

18. Patents \$\sim 1935(5)\$

When there is no genuine issue of material fact regarding whether an abstract-idea directed claim element or claimed combination is well-understood, routine, and conventional to a skilled artisan in the relevant field, patent eligibility can be decided on summary judgment as a matter of law. 35 U.S.C.A. § 101.

19. Patents \$\sim 460\$

Claims in patent for methods for digitally processing and archiving files, which were directed to abstract idea of parsing and comparing data, lacked transformative inventive concept, and thus claims were patent ineligible; claim did not recite any of the purportedly unconventional activities disclosed in specification, such as eliminating redundancy of stored object structures or effecting a one-to-many change of linked documents within an archive. 35 U.S.C.A. § 101.

20. Patents \$\sim 1935(5)\$

Genuine issue of material fact existed as to whether claims that were directed to abstract ideas of parsing, comparing, storing, and/or editing data had transformative inventive concept and thus were patent eligible, precluding summary judgment in action for infringement of patent for methods for digitally processing and archiving files. 35 U.S.C.A. § 101.

Patents \$\iint 2091\$

7,447,713. Invalid in Part.

Appeal from the United States District Court for the Northern District of Illinois in No. 1:12-cv-09023, Judge John Z. Lee.

James P. Hanrath, Much Shelist, PC, Chicago, IL, argued for plaintiff-appellant. Also represented by Michael John Femal; Paul Skiermont, Skiermont Derby LLP, Dallas, TX.

WILLIAM R. PETERSON, Morgan, Lewis & Bockius LLP, Houston, TX, argued for defendant-appellee. Also represented by Thomas R. Davis, David Jack Levy; Jason C. White, Nicholas A. Restauri, Chicago, IL.

Before Moore, Taranto, and Stoll, Circuit Judges.

Moore, Circuit Judge.

Steven E. Berkheimer appeals the United States District Court for the Northern District of Illinois' summary judgment holding claims 1–7 and 9 of U.S. Patent No. 7,447,713 ('713 patent) invalid as ineligible under 35 U.S.C. § 101. Mr. Berkheimer also appeals the district court's decision holding claims 10–19 of the '713 patent invalid for indefiniteness. For the reasons discussed below, we affirm-in-part, vacate-in-part, and remand for further proceedings.

Background

The '713 patent relates to digitally processing and archiving files in a digital asset management system. '713 patent at 1:11–12. The system parses files into multiple objects and tags the objects to create relationships between them. *Id.* at 1:13–18, 16:26–36. These objects are analyzed and compared, either manually or automatically, to archived objects to determine whether variations exist based on predetermined standards and rules. *Id.* at 13:14–20, 16:37–51. This system eliminates redundant storage of common text and graphical ele-

ments, which improves system operating efficiency and reduces storage costs. *Id.* at 2:53–55, 16:52–54. The relationships between the objects within the archive allow a user to "carry out a one-to-many editing process of object-oriented data," in which a change to one object carries over to all archived documents containing the same object. *Id.* at 15:65–16:2, 16:52–60.

Mr. Berkheimer sued HP Inc. in the Northern District of Illinois, alleging infringement of claims 1–7 and 9–19 of the '713 patent. Following a *Markman* hearing, the district court concluded that the term "archive exhibits minimal redundancy" in claim 10 is indefinite and renders claim 10 and its dependents invalid. HP moved for summary judgment that claims 1–7 and 9 are patent ineligible under 35 U.S.C. § 101, and the district court granted the motion. Mr. Berkheimer appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

I. Indefiniteness

[1–4] We review indefiniteness determinations de novo except for necessary subsidiary fact findings, which we review for clear error. Cox Commc'ns v. Sprint Commc'n Co., 838 F.3d 1224, 1228 (Fed. Cir. 2016). Under 35 U.S.C. § 112, patent claims must "particularly point[] out and distinctly claim[] the subject matter" regarded as the invention. A lack of definiteness renders the claims invalid. Nautilus, Inc. v. Biosig Instruments, Inc., — U.S. —, 134 S.Ct. 2120, 2125, 189 L.Ed.2d 37 (2014). Claims, viewed in light of the specification and prosecution history, must "inform those skilled in the art about the scope of the invention with reasonable certainty." Id. at 2129; see Interval Licensing LLC v. AOL, Inc., 766 F.3d 1364, 1371 (Fed. Cir. 2014) ("The claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art."). This standard "mandates clarity, while recognizing that absolute precision is unattainable." *Nautilus*, 134 S.Ct. at 2129. "Claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention." *Interval Licensing*, 766 F.3d at 1370.

[5] The district court analyzed the term "archive exhibits minimal redundancy" in claim 10 and determined that the intrinsic evidence "leaves a person skilled in the art with a highly subjective meaning of 'minimal redundancy.'" Berkheimer v. Hewlett-Packard Co., 2015 WL 4999954, at *9-10 (N.D. Ill. Aug. 21, 2015). It relied on the declaration of HP's expert, Dr. Schonfeld, to find that an ordinarily skilled artisan would not have known what the term "minimal redundancy" meant in claim 10. Id. at *10. We hold that the district court's subsidiary factual finding based on Dr. Schonfeld's declaration was not clearly erroneous and affirm its indefiniteness determination for claims 10-19.

We look first to the language of the claim to determine whether the meaning of "minimal redundancy" is reasonably clear. Claim 10 recites "a storage medium, and a set of executable instructions for establishing an archive of documents represented by linked object oriented elements stored in the medium, wherein the archive exhibits minimal redundancy with at least some elements linked to pluralities of the elements." Claims 11–19 depend from claim 10 and therefore include the same limitation. This claim language is not reasonably clear as to what level of redundancy in the archive is acceptable.

The specification uses inconsistent terminology to describe the level of redundancy that the system achieves. For exam-

ple, it describes "minimiz[ing] redundant objects," '713 patent at 16:50-51, "eliminating redundancy," id. at 16:52, and "reducing redundancies," id. at 15:18-19. The only example included in the specification is an archive that exhibits no redundancy. '713 patent at 13:5-13. The claim language, however, does not require elimination of all redundancies from the archive. For example, the specification discloses providing users with "user interfaces and tools for examining and *choosing* the elimination of document and document element redundancies." Id. at 6:60-65 (emphasis added). Indeed, Mr. Berkheimer acknowledges that "the invention attempts to minimize redundancy but may not in all cases achieve absolute [elimination of] redundancy." Appellant Br. at 64. The specification contains no point of comparison for skilled artisans to determine an objective boundary of "minimal" when the archive includes some redundancies. Sonix Tech. Co., Ltd. v. Publ'ns Int'l, Ltd., 844 F.3d 1370, 1379 (Fed. Cir. 2017) (holding that specific examples in the specification provided "points of comparison" that helped form an objective standard of the claim's scope).

The prosecution history does not add clarity. In response to an indefiniteness rejection during prosecution, Mr. Berkheimer explained that the claim "desires to eliminate redundancy" but includes the word "minimal" because "to eliminate all redundancy in the field of the claimed invention is not likely." J.A. 656. This does not explain how much redundancy is permitted.

In light of the lack of objective boundary or specific examples of what constitutes "minimal" in the claims, specification, and prosecution history, the district court properly considered and relied on extrinsic evidence. Relying on the specification's lack of explanation and specific examples of this term, HP's expert Dr. Schonfeld opined that the patent does not inform a skilled artisan of the meaning of "archive exhibits minimal redundancy" with reasonable certainty. Mr. Berkheimer did not provide the court with expert testimony of his own. While Dr. Schonfeld's explanation for his opinion was brief, it was not clear error for the district court to find that a skilled artisan would not have known the meaning of "minimal redundancy" with reasonable certainty.

Mr. Berkheimer's argument that "the archive" provides an objective baseline to measure what exhibits "minimal redundancy" misses the point. He is correct that it is "the archive" that must exhibit "minimal redundancy," but the issue is not what must exhibit minimal redundancy, but rather how much is minimal. Mr. Berkheimer's only arguments on this point are that terms of degree are not required to have an objective boundary and a contrary holding would invalidate a large swath of patents relying on terms of degree such as "minimal" or "substantial." Our case law is clear that the objective boundaries requirement applies to terms of degree. In Sonix, we held that the term "visually negligible" had an objective baseline to interpret the claims. 844 F.3d at 1378. In Interval Licensing, we held that the phrase "unobtrusive manner" lacked objective boundaries. 766 F.3d at 1371. We do not hold that all terms of degree are indefinite. We only hold that the term "minimal redundancy" is indefinite in light of the evidence in this case.

Accordingly, we affirm the district court's determination that claims 10–19 are invalid as indefinite.

II. Patent Eligibility

[6–8] In patent appeals, we apply the law of the regional circuit, here the Seventh Circuit, to issues not unique to patent law. AbbVie Deutschland GmbH & Co.,

KG v. Janssen Biotech, Inc., 759 F.3d 1285, 1295 (Fed. Cir. 2014). The Seventh Circuit reviews a grant of summary judgment de novo, drawing all reasonable inferences in the light most favorable to the non-movant. Arnett v. Webster, 658 F.3d 742, 757 (7th Cir. 2011). Summary judgment is appropriate when "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Patent eligibility under 35 U.S.C. § 101 is ultimately an issue of law we review de novo. Intellectual Ventures I LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1338 (Fed. Cir. 2017). The patent eligibility inquiry may contain underlying issues of fact. Mortg. Grader, Inc. v. First Choice Loan Servs. Inc., 811 F.3d 1314, 1325 (Fed. Cir. 2016).

[9, 10] First, we address whether Mr. Berkheimer waived his ability to argue that the dependent claims are separately patent eligible. Courts may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative. Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1352 (Fed. Cir. 2016); Intellectual Ventures I LLC v. Symantec Corp., 838 F.3d 1307, 1316 & n.9 (Fed. Cir. 2016). Because Mr. Berkheimer maintained that limitations included in dependent claims 4-7 bear on patent eligibility and never agreed to make claim 1 representative, we hold that arguments going specifically to claims 4-7 are properly preserved on appeal.

Mr. Berkheimer never agreed to make claim 1 representative. In his opposition

1. Though the district court stated it was treating claim 1 as representative, it separately

brief to HP's motion for summary judgment, he argued that claim 1 is not representative of the limitations found in the dependent claims. J.A. 1280. In particular, he argued that limitations in claim 5 drawn to effecting a one-to-many change add inventive concepts. Id. Other portions of his brief below argued that reducing redundancy and enabling one-to-many editing are patent eligible concepts. See, e.g., J.A. 1278 ("The innovative aspects of the claims improve computerized digital asset and content management systems by enabling control of object and object relationship integrity, reducing redundancy, [and] linking objects to enable one to many editing.... Such improvements to computer functionality are precisely the kind of improvements that have been found patent eligible under Alice." (internal citations omitted)). Because claim 1 does not recite reducing redundancy or enabling one-tomany editing, we interpret these arguments as applying to dependent claims 4-7, which include these limitations. Mr. Berkheimer makes these same arguments to us on appeal.

The district court stated that it was treating claim 1 as representative because claim 1 is the only asserted independent claim and Mr. Berkheimer focused "all of his primary arguments" on claim 1.1 Berkheimer v. Hewlett-Packard Co., 224 F.Supp.3d 635, 643 n.6 (N.D. Ill. Dec. 12, 2016). Neither rationale justifies treating claim 1 as representative. A claim is not representative simply because it is an independent claim. Indeed, Mr. Berkheimer advanced meaningful arguments regarding limitations found only in the dependent claims. In acknowledging that Mr. Berkheimer focused his "primary arguments" on claim 1, the district court necessarily

analyzed the dependent claims.

recognized that he raised arguments regarding the dependent claims. Thus, Mr. Berkheimer's separate arguments regarding claims 4–7 are not waived.

[11, 12] Turning to the merits of the § 101 inquiry, anyone who "invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may obtain a patent. 35 U.S.C. § 101. Because patent protection does not extend to claims that monopolize the "building blocks of human ingenuity," claims directed to laws of nature, natural phenomena, and abstract ideas are not patent eligible. Alice Corp. Pty. Ltd. v. CLS Bank Int'l, — U.S. —, 134 S.Ct. 2347, 2354, 189 L.Ed.2d 296 (2014). The Supreme Court instructs courts to distinguish between claims that claim patent ineligible subject matter and those that "integrate the building blocks into something more." Id. "First, we determine whether the claims at issue are directed to" a patent-ineligible concept. Id. at 2355. If so, "we consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." Id. (quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 78-79, 132 S.Ct. 1289, 182 L.Ed.2d 321 (2012)).

Independent claim 1 recites:

1. A method of archiving an item in a computer processing system comprising: presenting the item to a parser;

parsing the item into a plurality of multi-part object structures wherein portions of the structures have searchable information tags associated therewith;

evaluating the object structures in accordance with object structures previously stored in an archive; presenting an evaluated object structure for manual reconciliation at least where there is a predetermined variance between the object and at least one of a predetermined standard and a user defined rule.

The district court construed "parser" as "a program that dissects and converts source code into object code" and "parsing" as using such a program. J.A. 47. It construed "evaluating the object structures in accordance with object structures previously stored in an archive" as "analyzing the plurality of multi-part object structures obtained by parsing and comparing it with object structures previously stored in the archive to determine if there is variance between the object and at least one of a predetermined standard and a user defined rule." *Id.* These constructions are not challenged on appeal.

[13] At Alice step one, we must "determine whether the claims at issue are directed to a patent-ineligible concept." Alice, 134 S.Ct. at 2355. The district court held claim 1 is directed to the abstract idea of "using a generic computer to collect, organize, compare, and present data for reconciliation prior to archiving." Berkheimer, 224 F.Supp.3d at 644. Mr. Berkheimer argues the district court characterized the invention too broadly and simplistically, ignoring the core features of the claims. We hold that claims 1-3 and 9 are directed to the abstract idea of parsing and comparing data; claim 4 is directed to the abstract idea of parsing, comparing, and storing data; and claims 5-7 are directed to the abstract idea of parsing, comparing, storing, and editing data.

These claims are similar to claims we held directed to an abstract idea in prior cases. See, e.g., In re TLI Commc'ns LLC Patent Litig., 823 F.3d 607, 613 (Fed. Cir. 2016); Content Extraction & Transmission

LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014). In Content Extraction, the claims at issue generally recited "a method of 1) extracting data from hard copy documents using an automated digitizing unit such as a scanner, 2) recognizing specific information from the extracted data, and 3) storing that information in a memory." 776 F.3d at 1345. We held those claims were directed to the abstract idea of "1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory." Id. at 1347. Similarly, in TLI, the claims recited a "method for recording and administering digital images," which involved "recording images using a digital pick up unit in a telephone unit," digitally storing them, transmitting the digital images and classification information to a server, and storing the digital images in the server based on the classification information. 823 F.3d at 610. We held the claim at issue used only conventional computer components to implement the abstract idea of "classifying and storing digital images in an organized manner." Id. at 613. Here, the specification explains that the parser "determines and extracts components of the standardized document or item representation" and reassembles the components "into composite output files." '713 patent at 3:61-4:17. Even though the parser separates the documents or items into smaller components than the claims determined to be abstract in Content Extraction and TLI, the concept is the same. The parsing and comparing of claims 1-3 and 9 are similar to the collecting and recognizing of Content Extraction, 776 F.3d at 1347, and the classifying in an organized manner of TLI, 823 F.3d at 613. Claim 4 adds the abstract concept of storing, and claims 5-7 add the abstract concept of editing.

Mr. Berkheimer argues that the claims are not abstract because the "parsing" lim-

itation roots the claims in technology and transforms the data structure from source code to object code. Limiting the invention to a technological environment does "not make an abstract concept any less abstract under step one." Intellectual Ventures I, 850 F.3d at 1340. That the parser transforms data from source to object code does not demonstrate non-abstractness without evidence that this transformation improves computer functionality in some way. See Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253, 1258 (Fed. Cir. 2017) ("[W]e must ... ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea." (internal quotations omitted)); Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335-36 (Fed. Cir. 2016) ("[T]he first step in the Alice inquiry in this case asks whether the focus of the claims [was] on the specific asserted improvement in computer capabilities ... or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool."). No such evidence exists on this record. Indeed, Mr. Berkheimer admitted that parsers had existed for years prior to his patent. J.A. 1106. Because the claims are directed to an abstract idea, we proceed to the second step of the Alice inquiry.

[14] At step two, we "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent eligible application." Alice, 134 S.Ct. at 2355 (quoting Mayo, 566 U.S. at 78–79, 132 S.Ct. 1289). The second step of the Alice test is satisfied when the claim limitations "involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" Content Extraction, 776 F.3d at 1347–48 (quoting Alice, 134 S.Ct. at 2359).

[15-17] The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact. Any fact, such as this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence. See Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95, 131 S.Ct. 2238, 180 L.Ed.2d 131 (2011). Like indefiniteness, enablement, or obviousness, whether a claim recites patent eligible subject matter is a question of law which may contain underlying facts. Akzo Nobel Coatings, Inc. v. Dow Chem. Co., 811 F.3d 1334, 1343 (Fed. Cir. 2016) ("Indefiniteness is a question of law that we review de novo, [] subject to a determination of underlying facts."); Alcon Research Ltd. v. Barr Labs., Inc., 745 F.3d 1180, 1188 (Fed. Cir. 2014) ("Whether a claim satisfies the enablement requirement of 35 U.S.C. § 112 is a question of law that we review without deference, although the determination may be based on underlying factual findings, which we review for clear error."); Apple Inc. v. Samsung Elecs. Co., Ltd., 839 F.3d 1034, 1047 (Fed. Cir. 2016) (en banc) ("Obviousness is a question of law based on underlying facts."). We have previously stated that "[t]he § 101 inquiry 'may contain underlying factual issues." Mortg. Grader, 811 F.3d at 1325 (emphasis in original) (quoting Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1341 (Fed. Cir. 2013)). And the Supreme Court recognized that in making the § 101 determination, the inquiry "might sometimes overlap" with other factintensive inquiries like novelty under § 102. Mayo, 566 U.S. at 90, 132 S.Ct. 1289.

[18] As our cases demonstrate, not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry. See, e.g., Content

Extraction, 776 F.3d at 1349 (patent owner conceded the argued inventive concept "was a routine function of scanning technology at the time the claims were filed"): Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1370 (Fed. Cir. 2015) (patent owner argued an "interactive interface" is "a specific application of the abstract idea that provides an inventive concept" and did not dispute that the computer interface was generic). Whether a claim recites patent eligible subject matter is a question of law which may contain disputes over underlying facts. Patent eligibility has in many cases been resolved on motions to dismiss or summary judgment. Nothing in this decision should be viewed as casting doubt on the propriety of those cases. When there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law.

Here, the district court concluded that the claims do not contain an inventive concept under Alice step two because they describe "steps that employ only 'well-understood, routine, and conventional' computer functions" and are claimed "at a relatively high level of generality." Berkheimer, 224 F.Supp.3d at 647-48 (quoting Content Extraction, 776 F.3d at 1348). Mr. Berkheimer argues portions of the specification referring to reducing redundancy and enabling one-to-many editing contradict the district court's finding that the claims describe well-understood, routine, and conventional activities. He argues, both below and on appeal, that summary judgment is improper because whether the claimed invention is well-understood, routine, and conventional is an underlying fact question for which HP offered no evidence. While patent eligibility is ultimately a question of law, the district court erred in concluding there are no underlying factual questions to the § 101 inquiry. *Id.* at 642. Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination. Whether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.

Mr. Berkheimer argues that the claimed combination improves computer functionality through the elimination of redundancy and the one-to-many editing feature, which provides inventive concepts. The specification of the '713 patent discusses the state of the art at the time the patent was filed and the purported improvements of the invention. Conventional digital asset management systems at the time included "numerous documents containing multiple instances of redundant document elements." '713 patent at 1:24-27. This redundancy in conventional systems led to "inefficiencies and increased costs." Id. at 2:22-26. The specification explains that the claimed improvement increases efficiency and computer functionality over the prior art systems:

By eliminating redundancy in the archive 14, system operating efficiency will be improved, storage costs will be reduced and a one-to-many editing process can be implemented wherein a singular linked object, common to many documents or files, can be edited once and have the consequence of the editing process propagate through all of the linked documents and files. The one-to-many editing capability substantially reduces effort needed to up-date files which represent packages or packaging manuals

or the like as would be understood by those of skill in the art.

Id. at 16:52-60.

The specification describes an inventive feature that stores parsed data in a purportedly unconventional manner. This eliminates redundancies, improves system efficiency, reduces storage requirements, and enables a single edit to a stored object to propagate throughout all documents linked to that object. Id. The improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities, see Content Extraction, 776 F.3d at 1347-48, so we must analyze the asserted claims and determine whether they capture these improvements, Alice, 134 S.Ct. at 2357.

[19] The parties dispute whether these improvements to computer functionality are captured in the claims. See Appellant Br. at 42; Appellee Br. at 39-40, 43-44. We conclude that claim 1 does not recite an inventive concept sufficient to transform the abstract idea into a patent eligible application. Claim 1 recites a method of archiving including parsing data, analyzing and comparing the data to previously stored data, and presenting the data for reconciliation when there is a variance. It does not include limitations which incorporate eliminating redundancy of stored object structures or effecting a one-to-many change of linked documents within an archive. It does not even require the storage of data after it is presented for manual reconciliation. Thus, it does not recite any of the purportedly unconventional activities disclosed in the specification. Mr. Berkheimer does not advance any separate arguments regarding claims 2-3 and 9. Even considering these claims separately, they recite patent ineligible subject matter for the same reason.

Mr. Berkheimer argues that claim 1 recites an improvement to computer functionality and digital asset management systems. Mr. Berkheimer, however, admitted that parsers and the functions they perform existed for years before his patent. J.A. 1106. These conventional limitations of claim 1, combined with limitations of analyzing and comparing data and reconciling differences between the data, "fail to transform th[e] abstract idea into a patent-eligible invention." Alice, 134 S.Ct. at 2357. The limitations amount to no more than performing the abstract idea of parsing and comparing data with conventional computer components. Because claims 1-3 and 9 do not capture the purportedly inventive concepts, we hold that claims 1-3 and 9 are ineligible.

[20] Claims 4-7, in contrast, contain limitations directed to the arguably unconventional inventive concept described in the specification. Claim 4 recites "storing a reconciled object structure in the archive without substantial redundancy." specification states that storing object structures in the archive without substantial redundancy improves system operating efficiency and reduces storage costs. '713 patent at 16:52-58. It also states that known asset management systems did not archive documents in this manner. Id. at 2:22-26. Claim 5 depends on claim 4 and further recites "selectively editing an object structure, linked to other structures to thereby effect a one-to-many change in a plurality of archived items." The specification states one-to-many editing substantially reduces effort needed to update files because a single edit can update every document in the archive linked to that object structure. Id. at 16:58-60. This oneto-many functionality is more than "editing data in a straightforward copy-and-paste fashion," as characterized by the district court. Berkheimer, 224 F.Supp.3d at 645. According to the specification, conventional digital asset management systems cannot perform one-to-many editing because they store documents with numerous instances of redundant elements, rather than eliminate redundancies through the storage of linked object structures. '713 patent at 1:22–55, 4:4–9, 16:52–60. Claims 6–7 depend from claim 5 and accordingly contain the same limitations. These claims recite a specific method of archiving that, according to the specification, provides benefits that improve computer functionality.

HP argues that redundancy and efficiency are considerations in any archival system, including paper-based systems. The district court agreed. Berkheimer, 224 F.Supp.3d at 647. At this stage of the case, however, there is at least a genuine issue of material fact in light of the specification regarding whether claims 4-7 archive documents in an inventive manner that improves these aspects of the disclosed archival system. Whether claims 4-7 perform well-understood, routine, and conventional activities to a skilled artisan is a genuine issue of material fact making summary judgment inappropriate with respect to these claims.

We do not decide today that claims 4–7 are patent eligible under § 101. We only decide that on this record summary judgment was improper, given the fact questions created by the specification's disclosure.

Conclusion

For the foregoing reasons, we affirm the district court's decision that claims 10–19 of the '713 patent are invalid as indefinite and its grant of summary judgment that claims 1–3 and 9 of the '713 patent are ineligible under 35 U.S.C. § 101. We vacate the district court's grant of summary judgment that claims 4–7 are ineligible

under § 101 and remand for further proceedings.

AFFIRMED-IN-PART, VACATED-IN-PART, AND REMANDED

Costs

No costs.



IN RE: NORDT DEVELOPMENT CO., LLC, Appellant

2017-1445

United States Court of Appeals, Federal Circuit.

Decided February 8, 2018

Background: During patent prosecution, examiner rejected as anticipated claims in patent application directed to an elastic knee brace having a framework and a hinge with a strut and arm components, and patentee appealed. The United States Patent and Trademark Office, Patent Trial and Appeal Board (PTAB), No. 13/241,865, 2016 WL 6560183, affirmed rejection of claims. Patentee appealed.

Holding: The Court of Appeals, Stoll, Circuit Judge, held that remand to PTAB was warranted to construe term "injection molded."

Vacated and remanded.

1. Patents \$\sim 1138\$

The Court of Appeals reviews the Patent Trial and Appeal Board's (PTAB) claim construction, which is based on a review of only intrinsic evidence, de novo.

2. Patents €=1409

Claim term "injection molded" in patent application directed to an elastic knee brace having a framework and a hinge with a strut and arm components was structural limitation, rather than process, warranting remand to Patent Trial and Appeal Board (PTAB) to construe term in patent prosecution; although application described "injection molded" as a process of manufacture, specification conveyed structural meaning to "injection molded," and patentee asserted that there were clear structural differences between knee brace made with fabric components and a knee brace made with injection-molded components.

3. Patents €=1317

Words of limitation that can connote with equal force a structural characteristic of the product or a process of manufacture are commonly and by default interpreted in their structural sense, unless the patentee has demonstrated otherwise.

Patents \$\infty\$2091

6,238,360. Cited.

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 13/241,865.

JEREMY COOPER DOERRE, Tillman Wright PLLC, Charlotte, NC, argued for appellant.

Joseph Gerard Piccolo, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Joseph Matal. Also represented by Nathan K. Kelley, Alexandria, VA, Thomas W. Krause, William Lamarca, Alexandria, VA.

Before Moore, Taranto, and Stoll, Circuit Judges.

EXHIBIT F

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

STEVEN E. BERKHEIMER,

Plaintiff,

No. 1:12-cy-09023

v.

Judge John Z. Lee

HEWLETT-PACKARD COMPANY,

Defendant.

JOINT STATUS REPORT AND PROPOSAL FOR CASE MANAGEMENT SCHEDULE FOR RE-OPENING OF FACT DISCOVERY

Plaintiff Steven E. Berkheimer and Defendant Hewlett-Packard Company, now known as HP Inc., through their respective undersigned counsel, jointly advise the Court that, on January 13, 2020, the U.S. Supreme Court denied HP's Petition for a Writ of Certiorari. The parties propose the below Agreed Case Management Schedule upon remand. The parties' proposed schedule contemplates that fact discovery will be reopened to a limited extent on remand to account for changed circumstances since the prior close of fact discovery. In particular, fact discovery will reopen to address information of changed circumstance and supplemental updates that were not previously available during the initial fact discovery period, including, but not limited to: (i) updated sales, licensing, and revenue information through HP's divestiture of its Exstream product; and (ii) information pertaining to HP's divestiture of Exstream to OpenText Corporation.

Following the close of this limited re-opening of fact discovery, the parties propose that Berkheimer's and HP's financial experts be permitted to serve supplemental expert reports limited to addressing the newly produced information on remand. The parties' proposed case management

schedule also includes dates for timely completing expert discovery and submitting any further dispositive motions.

In accordance with the aforementioned considerations, the parties propose the following Agreed Case Management Schedule on remand:

EVENT SCHEDULED	GOVERNING LOCAL RULE OR ORDER	DEADLINE
Limited Re-opening of Fact Discovery upon Remand	N/A	2/3/2020
Close of Fact Discovery Upon Remand	N/A	4/30/2020
Snelson Expert Witness Supplemental Report Addressing Remand Discovery	(Dkt. No. 228)	5/15/2020
Malackowski Expert Witness Supplemental Report Addressing Remand Discovery	(Dkt. No. 228)	5/29/2020
Completion of Expert Witness Depositions	(LPR 5.2)	7/17/2020
Dispositive Motions	(LPR 6.1)	8/7/2020
Pre-Trial and Trial	N/A	In accordance with the Court's calendar

DATED: January 28, 2020

Respectfully submitted,

Agreed:

By:/s/James P. Hanrath
James P. Hanrath (IL. ARDC No. 3123374)
jhanrath@muchshelist.com

By:/s/ Jason C. White Jason C. White Scott D. Sherwin Jonathan L. Loew (IL. ARDC No. 6184157) jloew@muchshelist.com MUCH SHELIST, P.C. 191 North Wacker Drive, Suite 1800 Chicago, Illinois 60606 (312) 521-2000

Paul J. Skiermont (IL. ARDC No. 6278464)
pskiermont@skeirmontderby.com
Skiermont Derby LLP
2200 Ross Avenue, Suite 4800W
Dallas, Texas 75201
(214) 978-6600

Attorneys for Steven E. Berkheimer

Nicholas A. Restauri 77 W. Wacker Drive, Suite 500 Chicago, IL 60601

Tel.: (312) 324-1000 Fax: (312) 324-1001

E-mail: jwhite@morganlewis.com
E-mail: ssherwin @morganlewis.com

E-mail: nicholas.restauri@morganlewis.com

David J. Levy (Admitted Pro Hac Vice)
dlevy@morganlewis.com
Thomas R. Davis (Admitted Pro Hac Vice)
tdavis@morganlewis.com
MORGAN, LEWIS & BOCKIUS, LLP
1000 Louisiana Street, Suite 4000
Houston, Texas 77002
+1.713.890.5000 Telephone
+1.713.890.5001 Facsimile

Attorneys for Defendant HP Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system this 28th day of January, 2020.

/s/ Jason C. White
Jason C. White

EXHIBIT G

UNITED STATES DISTRICT COURT FOR THE Northern District of Illinois – CM/ECF LIVE, Ver 6.3.1 Eastern Division

Steven E. Berkheimer		
	Plaintiff,	
v.		Case No.: 1:12-cv-09023
		Honorable John Z. Lee
Hewlett-Packard Company		
	Defendant.	

NOTIFICATION OF DOCKET ENTRY

This docket entry was made by the Clerk on Thursday, February 13, 2020:

MINUTE entry before the Honorable John Z. Lee:The Court approves the case management schedule: The deadline for limited Re–opening of Fact Discovery upon Remand is 2/3/20; Close of fact discovery upon remand is 4/30/20.; Snelson expert witness supplemental report addressing remand discovery is 5/15/20; Malakowski expert witness supplemental report addressing remand discovery is due by 5/29/20; the deadline for the completion of expert witness deposition is 7/17/20; Dispositive motions are due by 8/7/20. Mailed notice(ca,)

ATTENTION: This notice is being sent pursuant to Rule 77(d) of the Federal Rules of Civil Procedure or Rule 49(c) of the Federal Rules of Criminal Procedure. It was generated by CM/ECF, the automated docketing system used to maintain the civil and criminal dockets of this District. If a minute order or other document is enclosed, please refer to it for additional information.

For scheduled events, motion practices, recent opinions and other information, visit our web site at www.ilnd.uscourts.gov.